

2012 Annual Groundwater and Surface Water Monitoring Report

Prepared for
Owens Corning
4837 Highway 81 South
Anderson, South Carolina
January 31, 2013

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List of Abbreviations

1,1-DCA	1,1-dichloroethane	TCE	trichloroethene
1,2-DCA	1,2-dichloroethane	trans-1,2-DCE	trans-1,2-dichloroethene
1,1-DCE	1,1-dichloroethene	U. S. EPA	United States Environmental Protection Agency
1,1,1-TCA	1,1,1-trichloroethane	VOC	volatile organic compound
AES	Analytical Environmental Services, Inc.	Waterloo	Solinst Waterloo Multilevel Groundwater Monitoring System
amsl	above mean sea level		
bgs	below ground surface		
cis-1,2-DCE	cis-1,2-dichloroethene		
DO	dissolved oxygen		
DNAPL	dense non-aqueous phase liquid		
EISOP/QAM	Environmental Investigations Standard Operating Procedures and Quality Assurance Manual		
EB	equipment blank		
ft	feet or foot		
gpm	gallons per minute		
µg/L	micrograms per liter		
MCL	maximum contaminant level		
NAVD	North American Vertical Datum of 1988		
NTU	Nephelometric Turbidity Unit		
ORP	oxidation-reduction potential		
Owens Corning	Owens Corning Anderson		
PCE	tetrachloroethene		
QA/QC	quality assurance/quality control		
RCRA	Resource Recovery and Conservation Act		
RFI	RCRA Facility Investigation		
RL	reporting limit		
SCDHEC	South Carolina Department of Health and Environmental Control		
SESDPROC	Science and Ecosystem Support Division Groundwater Sampling Procedure		
SWMU	Solid Waste Management Unit		

Professional Geologist Certification

The 2012 Annual Groundwater and Surface Water Monitoring Report has been prepared under the direction and supervision of a qualified, State of South Carolina licensed, Professional Geologist. Mr. Reinhard Ruhmke, P.G., of Brown and Caldwell was responsible for the overall preparation of the Report.



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January 30, 2013

Date



Section 1

Introduction

This 2012 Annual Groundwater and Surface Water Monitoring Report was prepared by Brown and Caldwell on behalf of the Owens Corning Anderson (Owens Corning), South Carolina facility for submittal to the United States Environmental Protection Agency (U.S. EPA) in accordance with the October 1989 Consent Order (89-34-R) with the U.S. EPA under Section 3008(h) of the Resource Recovery and Conservation Act (RCRA). The report summarizes the August 2012 quarterly groundwater monitoring and November 2012 annual surface water and groundwater monitoring events. The results for the February and May 2012 quarterly groundwater sampling events were reported in the *2012 Semiannual Groundwater Sampling Report* dated July 30, 2012. The Consent Order requires that Owens Corning perform annual groundwater monitoring and in 2005 the U.S. EPA required that quarterly groundwater monitoring be conducted for select bedrock wells located in the Northeast Area.

This report fulfills the Consent Order requirements for submitting an Annual RCRA Facility Investigation Groundwater Report for 2012. Section 1 of this report presents an introduction. Section 2 summarizes the surface water and groundwater monitoring activities. Section 3 provides and discusses the analytical results and Section 4 provides conclusions. Appendices to this document contain the groundwater sampling forms, laboratory analytical reports, and historical groundwater data.

The Owens Corning facility is situated on approximately 160 acres of land located at 4837 Highway 81 South in Starr, South Carolina within Anderson County (Site). As shown on Figure 1 the property is bounded by Highway 81 South to the west, True Temper Road to the north, Keys Street to the east, and Harry Drive to the south. The facility is located approximately 4 miles south of the town of Anderson.

The facility began its composite systems business operations in 1951 and since then has engaged in the production of glass fiber reinforcements and similar materials for composite systems. Historical manufacturing processes involved a variety of chemicals, including acids and solvents, some of which were inadvertently released to the environment and resulted in significant Site investigation work that has been reported to the U.S. EPA and the South Carolina Department of Health and Environmental Control (SCDHEC).

Section 2

Groundwater and Surface Water Assessment

Brown and Caldwell personnel performed the third quarter groundwater monitoring event between August 6 and 17 and September 6, 2012 and the annual groundwater monitoring event between November 12 and November 16, 2012. Section 2 provides an overview of these events and includes detailed information on Site hydrogeology and aquifer characteristics, groundwater and surface water sampling locations, sampling procedures and analytical methods.

2.1 Subsurface Geology

The Owens Corning Site is located within the Inner Piedmont Belt of the Piedmont Geologic Physiographic Province that is characterized by moderate to high-grade metamorphic rocks of Precambrian to early Paleozoic age. The bedrock in the vicinity of the Site is granitic gneiss which is overlain by overburden comprised of clay and silt soil, and saprolite. The saprolite exhibits some structural characteristics of the parent rock material such as foliation and fracturing. The thickness of the soil and saprolite unit beneath the Site ranges from approximately 5 to 100 feet. The primary lineaments and fracture zones beneath the Site trend in a northeast and southwest orientation (LeGrand and Furcron, 1956). A more detailed description of the subsurface geology beneath the Site can be found in the Supplemental RCRA Facility Investigation (RFI) Report (Brown and Caldwell, 2009), which was prepared by Brown and Caldwell on behalf of Owens Corning for submittal to the U.S. EPA.

2.2 Aquifer Characteristics

At the Site, groundwater is present in both the overburden/saprolite unit and the bedrock unit. Water level measurements were collected from 36 wells during the August quarterly monitoring event and from 49 wells during the November annual monitoring event as identified in Tables 1 and 2, respectively. Refer to the Site Map on Figure 1 to identify well locations. This information was used to calculate groundwater elevations and prepare potentiometric maps for the overburden and bedrock aquifers for the August (Figures 2 through 6) and November (Figures 7 through 11) 2012 monitoring events. Ground surface and top of casing elevations are provided in Table 3 and depth to water and groundwater elevations are provided in Tables 1 and 2.

Based on the monitoring well measurements from August 2012, groundwater levels in the overburden aquifer ranged from 7.16 (MW-11) to 26.15 (TW-46) feet below ground surface (bgs) and from 773.06 to 790.43 feet in elevation (North American Vertical Datum of 1988 [NAVD88]). Measurements from the same time period taken from wells in the bedrock aquifer exhibit heads ranging from 0.83 feet above the top of the casing (MW-38 Zone 2) to 42.30 feet bgs (MW-42 Zone 1) and from 772.01 to 743.14 feet in elevation (NAVD88). In November 2012, the groundwater levels in the overburden aquifer ranged from 7.10 (MW-11) to 27.69 (MW-10) feet bgs and from 773.12 to 795.96 feet in elevation (NAVD88). Measurements from wells in the bedrock aquifer exhibit hydraulic heads ranging from 0.01 feet above top of casing (MW-38 Zone 2) to 50.47 feet bgs (MW-39 Zone 3) and from 771.19 to 755.73 feet in elevation (NAVD88). The variation in head in the bedrock aquifer is highly dependent on both the elevation and fractures present in the wells screened interval.

Based on the August 2012 data, groundwater onsite in both overburden and bedrock aquifers flows toward the fracture zones associated with Betsy Creek, giving an east-northeasterly gradient. This is consistent with the historical groundwater flow direction with the exception that groundwater from SWMU-9 was previously shown flowing more to the north than the northeast. Measurements from the bedrock aquifer wells offsite indicate that flow direction continues to align with Betsy Creek as the stream turns to flow to the north-northeast in the area of MW-35. The magnitude of the horizontal gradient onsite varies depending on the aquifer and fracture zone. Observed horizontal gradients are as follows: 0.0144 feet/foot (ft/ft) in the overburden (calculated between MW-21 and MW-23); 0.0142 in the bedrock aquifer in the 699-740 foot (ft) (NAVD88) zone (calculated between MW-27 and MW-41 Zone 1); 0.0253 in the bedrock aquifer in the 632-699 ft (NAVD88) zone (calculated between MW-15 and MW-22); 0.0117 in the bedrock aquifer in the 574-630 ft (NAVD88) zone (calculated between MW-19 and MW-41 Zone 2); and 0.0101 in the bedrock aquifer in the 430-530 ft (NAVD88) zone (calculated between MW-37 Zone 3 and MW-41 Zone 3). The following vertical gradients were also observed: a downward gradient of 0.035 in across the overburden/bedrock aquifer (calculated between MW-12 and MW-19); and an upward gradient of 0.0200 at the intersection of Keys Street and True Temper Road across the overburden/bedrock aquifer (calculated between MW-21 and MW-38 Zone 2).

The interim corrective measures bedrock hydraulic containment system started up on November 3, 2011. The system currently pumps groundwater from one of two bedrock extraction wells, EW-1, (located approximately 250 ft north of the intersection between Keys Street and True Temper Road – Figure 1), that has total depth of 450 ft bgs. The pump intake is at 425 ft bgs and currently withdraws groundwater at a rate of approximately 31 gallons per minute (gpm). The hydraulic containment system was active during the August and November groundwater sampling events, which affected the August and November 2012 potentiometric surfaces in all bedrock zones (Figures 3 through 6 and 8 through 11). Additional information regarding the interim corrective measures system will be reported in the Quarterly Performance Monitoring Report that will be submitted to the U.S. EPA and SCDHEC in February 2013. At some point, the second extraction well, EW-2, may be used depending on the performance of extraction well EW-1.

Based on the November 2012 data, groundwater flow in the overburden aquifer was consistent with previous sampling events flowing towards the fracture zones associated with Betsy Creek, giving an east-northeasterly gradient. The overburden aquifer was unaffected by the active pumping of extraction well EW-1 as a surface casing was installed. Groundwater flow in the bedrock aquifer generally follows the same east-northeasterly gradient along the Betsy Creek fracture zones, but due to the pumping associated with the hydraulic containment system, varying amounts of drawdown were observed in bedrock wells in the vicinity of EW-1. The amount of drawdown is dependant on the interconnectivity between the fracture system in the bedrock zone in which the wells are screened and the fracture system in the open borehole extraction well, EW-1. The distribution of drawdown within the bedrock system was used to aid in developing the bedrock groundwater potentiometric surfaces presented on Figures 8 through 11.

In order to calculate representative horizontal and vertical gradients, wells were selected in areas upgradient and downgradient from the drawdown associated with the pumping at EW-1. Observed horizontal gradients are as follows: 0.0133 in the overburden (calculated between MW-21 and MW-28); 0.0142 in the bedrock aquifer in the 699-740 ft (NAVD88) zone (calculated between MW-27 and MW-41 Zone 1); 0.0157 in the bedrock aquifer in the 632-699 ft (NAVD88) zone (calculated between MW-6 and MW-22); 0.0118 in the bedrock aquifer in the 574-630 ft (NAVD88) zone (calculated between MW-19 and MW-41 Zone 2); and 0.00816 in the bedrock aquifer in the 430-530 ft (NAVD88) zone (calculated between MW-37 Zone 3 and MW-41 Zone 3). The following vertical gradients were also observed: a downward gradient of 0.00464 in SWMU-9 across the overburden/bedrock aquifer (calculated between MW-6 and MW-28); and an upward gradient of 0.0178 at the intersection of Keys Street and True Temper Road across the overburden/bedrock aquifer (calculated between MW-21 and MW-38 Zone 2).

2.3 Groundwater Monitoring Wells

The original quarterly groundwater monitoring program included seven bedrock monitoring wells (MW-15, MW-22, MW-29R, MW-33, MW-35, MW-36 and MW-37). MW-33 has since been removed from the quarterly and annual groundwater monitoring program because it has become one of the groundwater extraction wells (EW-1) for the interim corrective measures hydraulic containment system. The removal of this well from the monitoring program is of little consequence since there are several wells in the surrounding area that provide both hydraulic potential and concentration data that are used to model plume behavior. The second extraction well, EW-2, was installed in 2011 and as discussed above, is not being used at this time. MW-38, MW-39, MW-41, MW-42 and MW-43 were installed and added to the quarterly and annual monitoring program in the summer of 2010 and the summer of 2011, respectively.

The annual groundwater monitoring program includes the following 46 overburden, top of rock and bedrock monitoring well locations, as shown on Figure 1:

- Overburden Wells: MW-1, MW-3, MW-4, MW-5, MW-7, MW-11, MW-12, MW-18, MW-26, MW-28, MW-32, TW-43, and TW-45
- Top of Rock Wells: MW-2, MW-9, MW-10, MW-13, MW-14, MW-17, MW-20, MW-21, MW-24, MW-25, MW-30, MW-31, TW-42 and TW-46
- Bedrock Wells: Alloy, MW-6, MW-15, MW-16, MW-19, MW-22, MW-27, MW-29R, MW-35, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42, MW-43, TW-40, TW-41 and TW-44.

Monitoring well TW-45 could not be gauged or sampled in November 2012 because the well collapsed. The need for replacing or abandoning TW-45 will be evaluated in 2013. The locations of the wells are shown on Figure 1 and well construction details are provided in Table 3. Multiple water-bearing zones were gauged and sampled in bedrock wells MW-29R, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42, and MW-43 (Tables 4 and 5). Wells MW-23, P1, and P2 were gauged to provide hydraulic head information but were not sampled as part of the quarterly or annual sampling programs.

2.4 Surface Water Monitoring Locations

The surface water monitoring program consists of collecting samples from eleven locations (SW-1, SW-3, SW-3A, SW-3B, SW-6, SW-10, SW-11, SW-12, SW-13, SW-14 and SW-15) in Betsy Creek. A surface water sample could not be collected at location SW-3B due to the creek being dry, likely due to ongoing drought conditions. The surface water samples were collected on November 15, 2012 and their locations are presented on Figure 12.

2.5 Groundwater and Surface Water Sampling Procedures

On August 6 and November 12, 2012, depth to groundwater measurements were collected from 36 and 49 monitoring wells locations, respectively. The water level meter was decontaminated between wells with an Alconox® solution and rinsed with distilled water.

Sampling procedures were performed in the same manner as the previous quarterly and annual sampling events. Prior to collecting groundwater samples from the wells, the wells were purged using either a low-flow submersible electric pump or a peristaltic pump. The Solinst Waterloo Multilevel Groundwater Monitoring System (Waterloo) monitoring zones were purged and sampled using their dedicated compressed air driven stainless steel double valve pumps. Groundwater was pumped at an approximate rate of 0.25 gpm through new or dedicated polyethylene tubing equipped with a field-calibrated, in-line YSI® 556 meter to measure field parameters: pH, temperature, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO). Turbidity was measured using a HF® Scientific DRT-15CE turbidity meter. Purging was considered complete when at least three of the field parameters had stabilized. An attempt was made to obtain turbidity readings of less than 10

Nephelometric Turbidity Units (NTUs); however, this was not achieved for all the wells. Groundwater samples were collected when pH, temperature and specific conductance had stabilized as defined in U.S. EPA's Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOP/QAM), November 2001 and Science and U.S. EPA's Ecosystem Support Division Groundwater Sampling Procedure (SESDPROC-301-RO), February 2007. Groundwater sampling field data sheets documenting the purging activities are included as Appendix A.

Groundwater samples were collected from the wells using the same low-flow pump that was used for purging. The pump was decontaminated between sample locations using an Alconox® solution and rinsed with distilled water. The groundwater samples were labeled, containerized, documented, placed into a cooler containing ice and chilled to approximately 4 degrees Celsius (temperatures verified by laboratory and are reported in the Laboratory Analytical Report in Appendix B). Monitoring wells were sampled from least contaminated to most contaminated, based on previous groundwater monitoring data, to minimize the potential for carryover and cross-contamination between wells.

Surface water samples were collected on November 15, 2012 by manually filling the sample containers with surface water using a pre-cleaned, disposable, 1 liter, polyethylene dipper.

2.6 Residential Well Sampling Procedures

During the November 2012 annual sampling event, 12 residential wells were sampled (Figure 13). The wells were sampled in accordance with methods described in U.S. EPA's Field Branches Quality System and Technical Procedures. Two residential wells located at 115 and 335 Elrod Road were not sampled due to an inoperable pump. Wells that pumped into a holding tank were purged of at least one tank volume (generally 15 to 20 gallons) and water quality parameters such as pH, conductivity, temperature, DO, ORP, and turbidity were measured and recorded in a field notebook. After purging, the samples were collected at a low flow rate through a hose connected to the holding tank. Wells that did not utilize a holding tank were sampled directly from the well head. The groundwater samples were labeled, containerized, documented, placed into a cooler containing ice and chilled to about 4 degrees Celsius (temperatures verified by laboratory and are reported in the Laboratory Analytical Report in Appendix B).

Once the analytical data were validated, a letter documenting the results for each well owner was prepared and submitted to each well owner by Mr. Steve Tenry, the Anderson Plant Environmental Manager.

2.7 Analytical Procedures

Groundwater, surface water, and residential well samples were submitted to Analytical Environmental Services, Inc. (AES) of Atlanta, Georgia for analysis of the focused list of volatile organic compounds (VOCs) using U.S. EPA Method 8260B. The focused list of VOCs included tetrachloroethene (PCE); trichloroethene (TCE); 1,1,1-trichloroethane (1,1,1-TCA); 1,1-dichloroethane (1,1-DCA); 1,2-dichloroethane (1,2-DCA); 1,1-dichloroethene (1,1-DCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); vinyl chloride; carbon tetrachloride; chloroform; methylene chloride; benzene; toluene; ethylbenzene and xylenes.

2.8 Quality Assurance/Quality Control

The groundwater sampling was performed in accordance with U.S. EPA's EISOP/QAM, November 2001 and U.S. EPA's Science and Ecosystem Support Division Groundwater Sampling Procedure (SESDPROC-301-RO), February 2007. To assess the quality of the sampling program, duplicate samples were collected (approximately one sample for every 20 samples) and analyzed for the focused list of VOCs. One duplicate sample was collected during the August sampling event. One duplicate sample was collected during the residential well sampling and two duplicate groundwater samples were collected during the November sampling event. An evaluation of the analytical results for the duplicate samples

showed that the reported constituents and concentrations were similar. Four equipment blanks (EBs) were collected during the August sampling and five EBs were collected during the November sampling to determine the efficacy of non-dedicated equipment decontamination activities. The EB samples were obtained by collecting distilled water passed through or over decontaminated equipment. Trip blanks, provided by AES, were in all coolers and were submitted for analysis with the groundwater samples. The EB and trip blank samples were analyzed for the same constituents as the groundwater samples. No detections were found in any of the EB or trip blank samples. The analytical reports for these samples are provided in Appendix B.

Section 3

Analytical Results

The following section includes the results for the August 2012 quarterly groundwater event and the November 2012 annual surface water, groundwater, and residential well monitoring event. The August event included collecting samples from six bedrock wells located on the northeast portion of the Owens Corning property (including MW-15, MW-22, MW-29R, MW-36, MW-37 and MW-38), and five offsite bedrock wells (MW-35, MW-39, MW-41, MW-42, and MW-43). For the November event, samples were collected from 59 overburden, (as stated in Section 2.3, TW-45 could not be sampled in November 2012 due to damage to the well), top of rock, and bedrock well locations (several samples were collected from eight bedrock wells that have screens across multiple water bearing zones), ten surface water locations, and 12 residential wells.

The August and November 2012 groundwater analytical results are summarized in Tables 4 and 5, respectively. The November 2012 surface water analytical results are summarized in Table 6, and the November 2012 residential well analytical results are summarized in Table 7. Historical groundwater analytical data can be found in previous reports submitted to U.S. EPA and summaries of this information can be found in Appendix C of this report. Analytical reports that include method detection limits and quality assurance/quality control (QA/QC) information are provided in Appendix B.

One analytical parameter, 1,1-DCE, was selected for presentation on isoconcentration contour maps for the August and November events as shown on Figures 14 through 22. This analyte was selected because it is the most prevalent and widespread analyte detected at the Site. A concentration map for 1,1,1-TCA in the overburden, top of rock and bedrock wells was also prepared because it was the parent compound originally released at SWMU-9; it is presented as Figure 23 for the November 2012 event.

3.1 Groundwater Analytical Results

3.1.1 Overburden and Top of Rock Aquifer

Consistent with observations made during previous monitoring events, during the November 2012 annual sampling event the highest VOC concentrations were detected in the overburden and top of rock aquifer in the vicinity of SWMU-9 where 1,1,1-TCA and 1,1-DCE are the primary VOC constituents (Tables 4 and 5). The highest 1,1,1-TCA and 1,1-DCE concentrations were measured in well MW-28 at 140,000 micrograms per liter ($\mu\text{g/L}$) and 140,000 $\mu\text{g/L}$, respectively. The 1,1,1-TCA concentrations in this well have fluctuated for years but have consistently been greater than 1 percent of the solubility limit (950,000 $\mu\text{g/L}$), thus suggesting the potential presence of dense non-aqueous phase liquid (DNAPL).

Similarly elevated concentrations of 1,1,1-TCA were detected in MW-7 where concentrations have been trending upward: 17,000 $\mu\text{g/L}$ (2007), 24,000 $\mu\text{g/L}$ (2008), 30,000 $\mu\text{g/L}$ (2009), 31,000 $\mu\text{g/L}$ (2010), and 53,000 $\mu\text{g/L}$ (2011) and then a decrease is seen in 2012 at 42,000 $\mu\text{g/L}$ in 2012. This too may be indicative of nearby DNAPL, which most likely would be in the form of residual stringers given the shallow depth of MW-7 and the absence of a confining clay layer. Methylene chloride was also detected in MW-7 at a concentration of 2,800 $\mu\text{g/L}$ which is above the MCL of 5 $\mu\text{g/L}$. However, this constituent has not been detected previously and is considered to be a common laboratory contaminant which is believed to be the source of the methylene chloride. The only other detection of 1,1,1-TCA during the November event was in MW-32 at a concentration of 16 $\mu\text{g/L}$, which was higher than in 2011 (13 $\mu\text{g/L}$).

No other samples produced detections of 1,1,1-TCA above the laboratory reporting limit (RL). The disappearance of 1,1,1-TCA in groundwater is consistent with known transformation mechanisms, particularly aqueous hydrolysis which is a very fast reaction.

Although there were no reported VOC detections other than 1,1,1-TCA, 1,1-DCE and methylene chloride in MW-7 and MW-28, these two samples required dilution during analysis by the analytical laboratory that resulted in reporting limits greater than U.S. EPA maximum contaminant levels (MCLs) which are 200 and 7 µg/L, respectively.

Several other overburden and top of rock wells contain 1,1-DCE at levels above the MCL. In the area of monitoring wells MW-11, MW-12, and MW-13, 1,1-DCE concentrations range from 290 to 380 µg/L. In the Northeast Area of the Site, however, concentrations of 1,1-DCE decrease to below the RL of 5 µg/L.

Other VOCs that exceeded MCLs in the overburden and top of rock wells were 1,2-DCA, carbon tetrachloride, TCE, and vinyl chloride. Similar to historical results, monitoring well MW-30, located northeast of SWMU-9, contained the highest concentrations of 1,2-DCA (21 µg/L) and carbon tetrachloride (150 µg/L). The only detection of TCE was in MW-17 (6.5 µg/L). The only detections of vinyl chloride were in monitoring wells MW-11 (8.7 µg/L), and MW-12 (4.1 µg/L).

3.1.2 Bedrock Aquifer

To understand the distribution of 1,1-DCE, isoconcentration maps were created for multiple vertical intervals within the fractured bedrock. The projected distribution of 1,1-DCE over the vertical intervals from 699 ft to 740 ft, 632 ft to 699 ft, 574 ft to 630 ft, and 430 ft to 530 ft (NAVD88) for the August and November events is presented on Figures 14 through 17 and Figures 19 through 22, respectively. Assuming that 1,1-DCE entered the top of bedrock near SWMU-9, the axis of the plume, consistent with the groundwater flow direction and local bedrock fracture patterns as identified in the Bedrock Geologic Map of the Little Mountain Area Anderson South Quadrangle is oriented to the north-northeast. Refer to the *Supplemental RCRA Facility Investigation Report* (Brown and Caldwell, 2009) for a more detailed review of these figures.

Concentrations of 1,1-DCE in well MW-29R Zone 3 and Zone 4 have been relatively stable over the four quarterly monitoring events conducted in 2012. In Zone 3, the concentration of 1,1-DCE varied over the course of the year following the historic trend at this location. In February the concentration was 230 µg/L, then increased to 310 µg/L in May, 370 µg/L in August, then dropped to 290 µg/L in November. In Zone 4, concentrations followed a similar trend, with a concentration of 130 µg/L in February, then increasing to 340 µg/L in May, 380 µg/L in August, and finally decreasing to 290 µg/L during the November monitoring event. Farther north and hydraulically downgradient of MW-29R, 1,1-DCE has not been detected in groundwater above MCLs in any of the three zones of MW-36 during the quarterly monitoring events since it was installed in 2008.

The 1,1-DCE concentration in well MW-37, located on the southeastern edge of the plume, has varied by zone over the past three years. Zone 1 and Zone 3 have remained relatively stable, showing no trend according to the Mann-Kendall Test (Appendix D). However the 1,1-DCE concentration in Zone 2 has displayed a decreasing trend. In 2012, the concentration of 1,1-DCE in MW-37 Zone 1 was 68 µg/L in February, 88 µg/L in May, 12 µg/L in August, and 91 µg/L in November. MW-37 Zone 2 followed a decreasing trend in 2012, containing concentrations of 150 µg/L in February, 260 µg/L in May, 35 µg/L in August, and 140 µg/L in November. The 1,1-DCE concentration in MW-37 Zone 3 was below the RL from February to November. Bedrock well MW-39 was installed during the summer of 2010 southeast of MW-37 to delineate 1,1-DCE in this direction. No VOCs, including 1,1-DCE, were detected above RLs during the August and November monitoring events in groundwater collected from MW-39 (Tables 4 and 5). Accordingly, delineation of the south edge of the plume appears to be complete.

Well MW-35, located northeast of the intersection of True Temper Road and Keys Streets, contained 280 µg/L of 1,1-DCE in August and 170 µg/L of 1,1-DCE in November. Bedrock wells MW-41 and MW-42 were installed during the summer of 2010 to delineate 1,1-DCE in the Northeast Area and added to the monitoring program. Both wells were installed with nested wells, such that three independent zones could be sampled. The 1,1-DCE concentration in two of the three zones of MW-41 decreased from August to November. Zone 1 decreased from 200 to 190 µg/L, Zone 2 from 360 to 78 µg/L, and Zone 3 increased from 8.9 to 78 µg/L. MW-42 and MW-43 are currently the farthest wells from the Site in the northeast direction. MW-42 is east of the northeastern portion of the plume and MW-43 is north of the northeastern portion of the plume. During the August and November monitoring events, no VOCs were detected above MCLs in groundwater collected from MW-42 and MW-43. Therefore, the plume appears to be delineated to the northeast.

The only other contaminant detected above an MCL in the bedrock wells was carbon tetrachloride. This contaminant was detected in MW-22 and MW-29R Zones 3 and 4 during August and November and additionally in MW-12, MW-13, MW-20, MW-24, MW-27, MW-30, MW-31 and TW-46 in November. The maximum concentration of carbon tetrachloride in bedrock wells was detected in MW-30 at 150 µg/L in November. No other parameters from the focused list of VOCs were detected above MCLs in the bedrock well samples.

1,1-DCE concentration trends for four bedrock wells, MW-27, MW-35, MW-37 (Zones 1, 2, and 3), and MW-41 (Zones 1, 2 and 3) were determined using the Mann-Kendall Test (Gilbert, 1987). This test is a non-parametric statistical test that is routinely used to identify trends in groundwater concentration data. Data utilized in the test included annual groundwater monitoring data from 2006 through 2012 for MW-27 resulting in seven data points. For MW-35 and MW-37, quarterly groundwater monitoring data was utilized from the August and November sampling events in 2010, and all four events in 2011 and 2012 for a total of ten data points. MW-41 was installed in August 2010 and ten data points were used for the test from all sampling events from August 2010 to November 2012. The Mann-Kendall test can be run on data sets with as few as 4 data points and a maximum of 10. According to the test results at a 90 percent confidence level, 1,1-DCE concentrations in wells MW-37 Zone 1, MW-37 Zone 3, and MW-41 Zone 2 showed no trend over the time periods described above. Over the same time periods, the 1,1-DCE concentration in MW-27, MW-35, MW-37 Zone 2, MW-41 Zone 1, and MW-41 Zone 3 displayed a decreasing trend, which indicates that the majority of the concentrations near the property boundary are decreasing. Refer to Appendix D for Mann-Kendall Test results.

3.2 Surface Water Analytical Results

Surface water samples were collected from Betsy Creek at ten locations (Figure 12). The creek was dry at location SW-3B, therefore, a sample was not collected. All VOC concentrations measured in November 2012 were below the applicable U.S. EPA Region IV Ecological Risk Assessment, Surface Water Screening Values and SCDHEC Water Quality Classifications and Standards. None of the parameters from the focused list of VOCs were detected during the November surface water sampling. All surface water analytical results are included in Table 6.

3.3 Residential Well Analytical Results

None of the parameters from the focused list of VOCs were detected above RLs in the residential well samples. All residential well analytical results are included in Table 7. Locations of the residential wells are provided on Figure 13, with the corresponding well location map ID's provided in Table 8.

Section 4

Summary and Conclusions

The third quarterly and the annual groundwater monitoring events were conducted at the Owens Corning Site in August and November 2012, respectively. Samples were collected from 11 bedrock wells during the August quarterly event and from 46 wells and ten surface water locations during the November annual event. In addition, samples were collected from 12 residential wells during the November event. The samples were analyzed for the focused list of VOCs. Multiple water-bearing zones were sampled in bedrock wells MW-29R, MW-36, MW-37, MW-38, MW-39, MW-41, MW-42 and MW-43.

The following conclusions were developed based on the data collected during the quarterly and annual monitoring events summarized in this report:

- Based on historical and recent Site monitoring data 1,1-DCE and 1,1,1-TCA are the primary constituents in groundwater, though 1,1-DCE is the primary constituent that persists beyond SWMU-9 and the property boundary and within both the overburden and bedrock water bearing zones.
- The highest concentrations of 1,1-DCE and 1,1,1-TCA are present in the overburden and top of rock water bearing zones in the vicinity of SWMU-9. Contaminants detected above their MCLs in the overburden and top of rock water bearing zones other than 1,1-DCE and 1,1,1-TCA were 1,2-DCA, carbon tetrachloride, TCE, and vinyl chloride.
- The plume of 1,1-DCE that originates in the vicinity of SWMU-9 travels downgradient towards the northeast and east towards Betsy Creek. The 1,1-DCE and 1,1,1-TCA groundwater plumes appear to be relatively stable and the downgradient boundaries of these plumes in the top of rock aquifer appear to be defined by wells MW-21 and MW-25, which were both non-detect.
- The main contaminant in the bedrock aquifer is 1,1-DCE. Concentration data obtained from Northeast Area bedrock wells MW-27, MW-35, MW-37 Zone 2, MW-41 Zone 1, and MW-41 Zone 3 and results from the Mann-Kendall Test at the 90 percent confidence level revealed that the plume concentrations in this area have been decreasing over the past 3 years. The only other VOC detected in bedrock wells above its' MCL was carbon tetrachloride; concentrations of carbon tetrachloride have remained stable at levels less than 31 µg/L over the past 3 years according to Mann-Kendall analysis results.
- Finally, during the August and November monitoring events, no VOCs were detected above MCLs in groundwater collected from the offsite bedrock wells, MW-39, MW-42, and MW-43. Monitoring well MW-42 and MW-43 are the farthest monitoring wells in the northeast direction from the Site, and monitoring well MW-39 is the farthest in the southeast direction. Therefore, the plume appears to be delineated to the north and east of the Site.



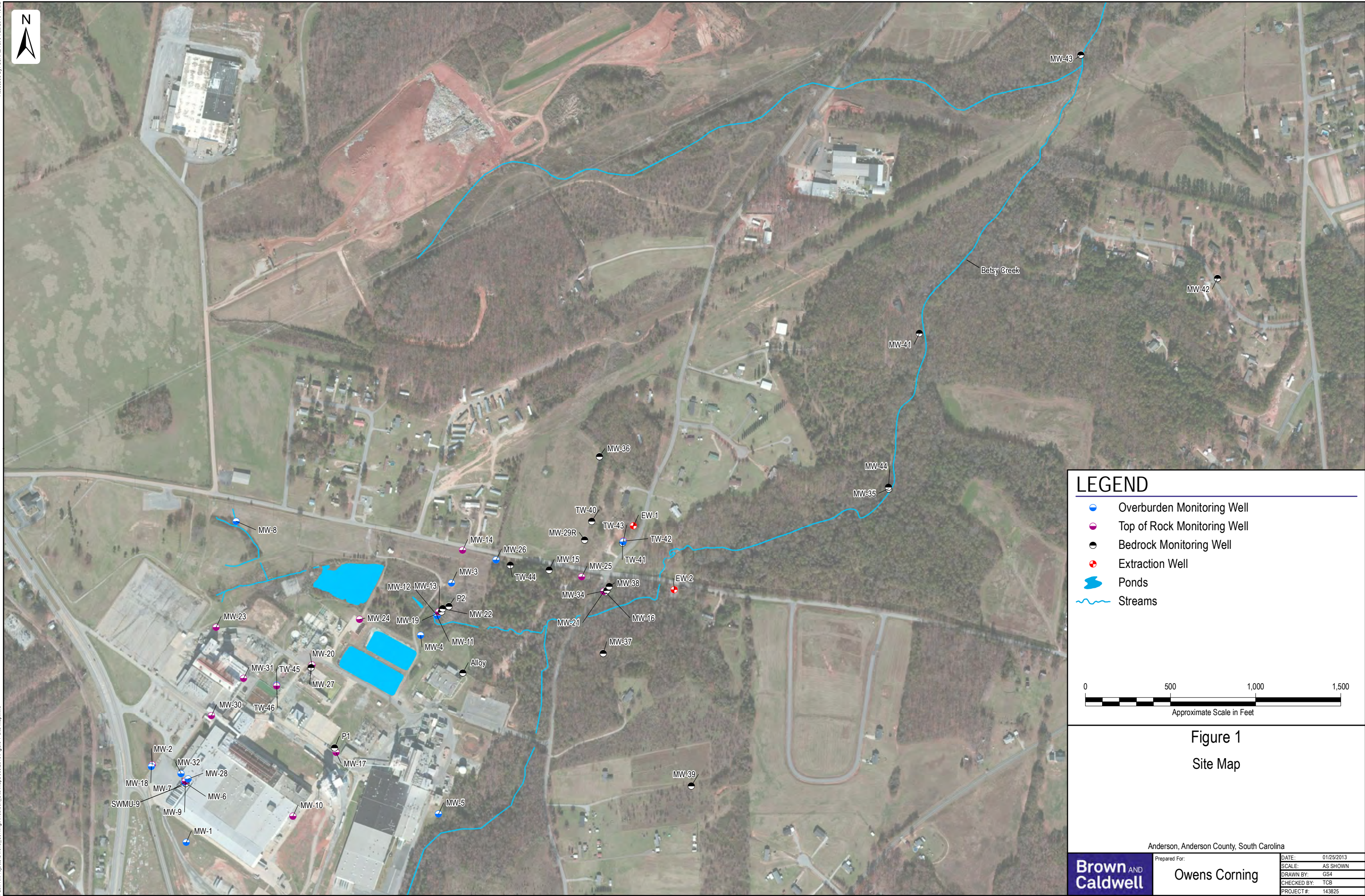
Section 5

Limitations

This document was prepared solely for Owens Corning in accordance with professional standards at the time the services were performed and in accordance with the contract between Owens Corning and Brown and Caldwell dated February 7, 2012. This document is governed by the specific scope of work authorized by Owens Corning; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Owens Corning and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

References

- Brown and Caldwell. 2009. *Supplemental Resource Conservation and Recovery (RCRA) Facility Investigation (RFI) Report*. Owens Corning – Starr Plant, Anderson, South Carolina.
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LEGEND

- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Ponds
- Streams

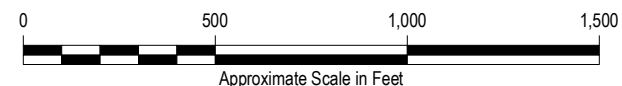


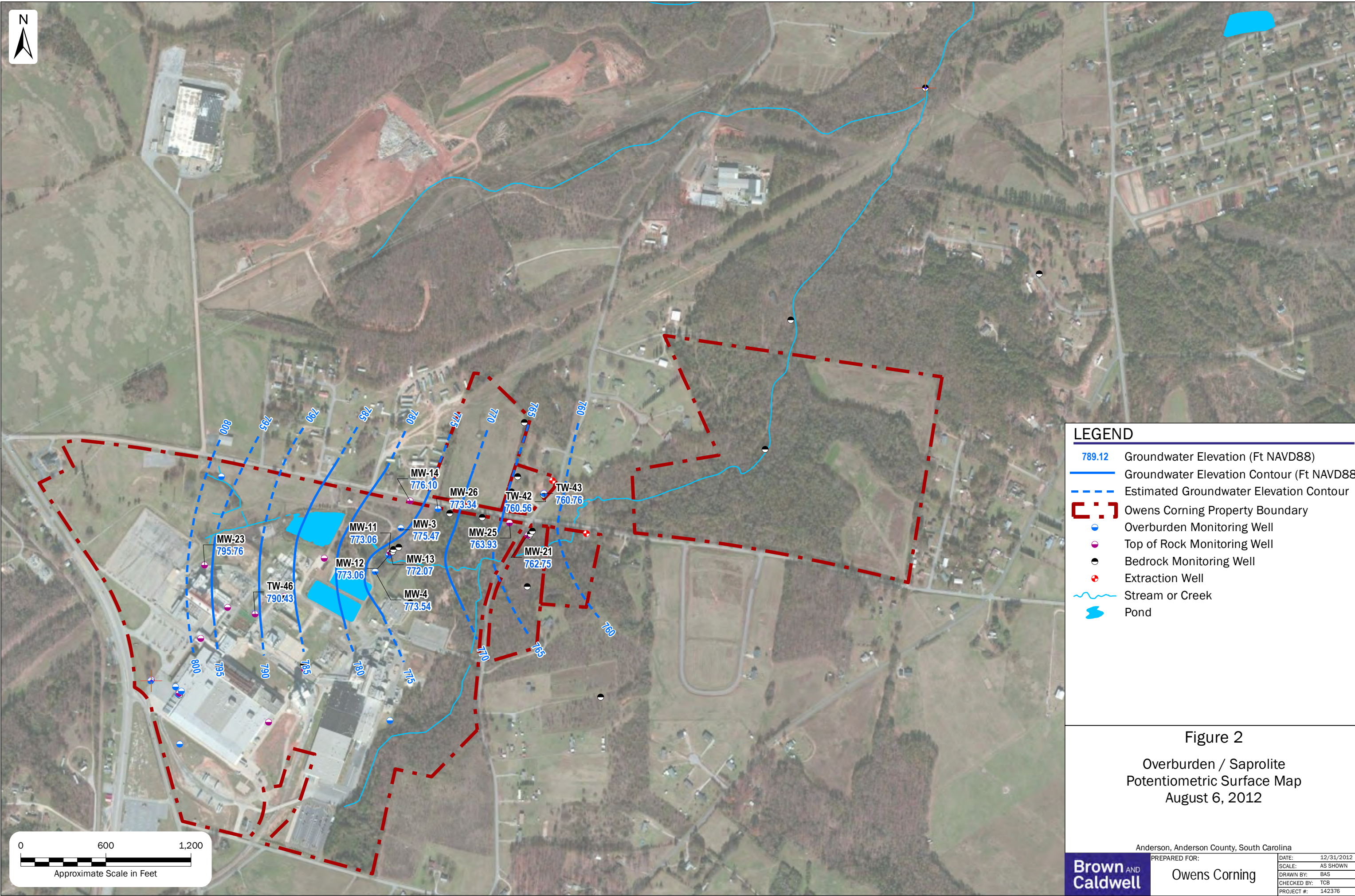
Figure 1 Site Map

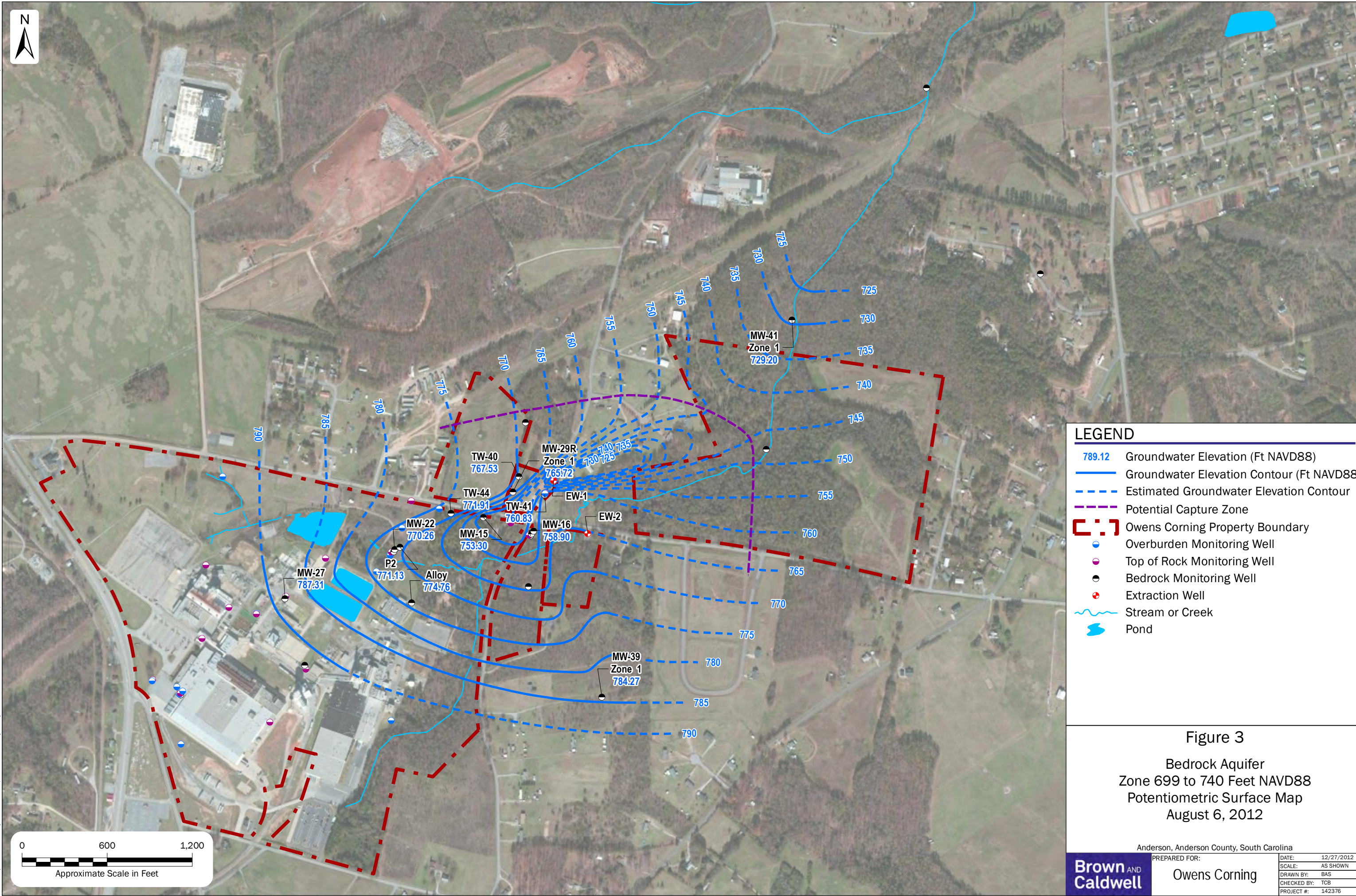
Anderson, Anderson County, South Carolina

Brown AND Caldwell

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Owens Corning

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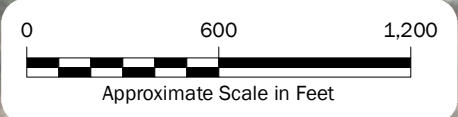




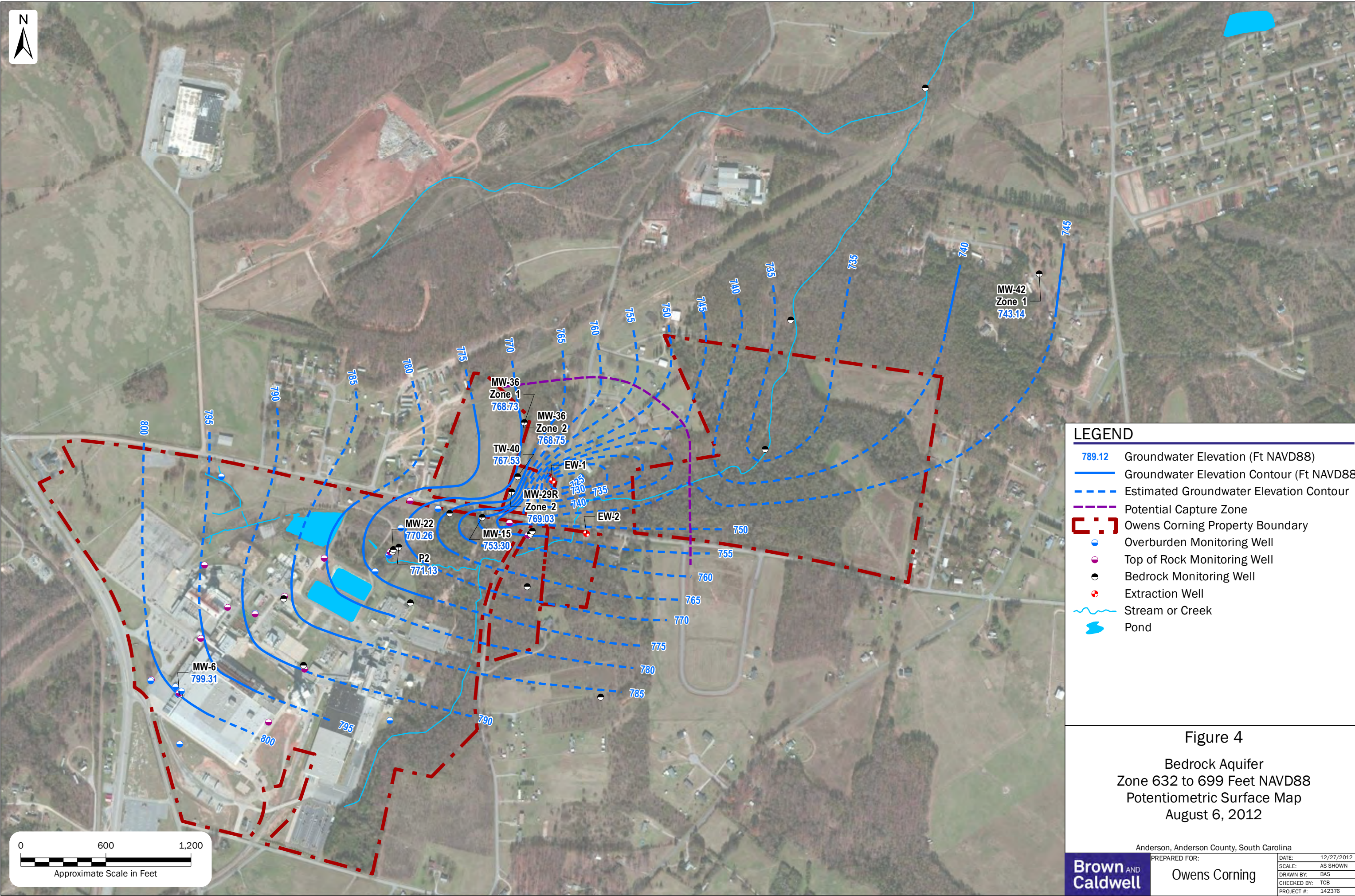
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- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

Figure 3
 Bedrock Aquifer
 Zone 699 to 740 Feet NAVD88
 Potentiometric Surface Map
 August 6, 2012



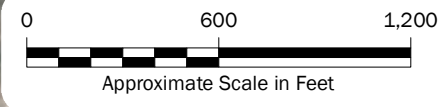
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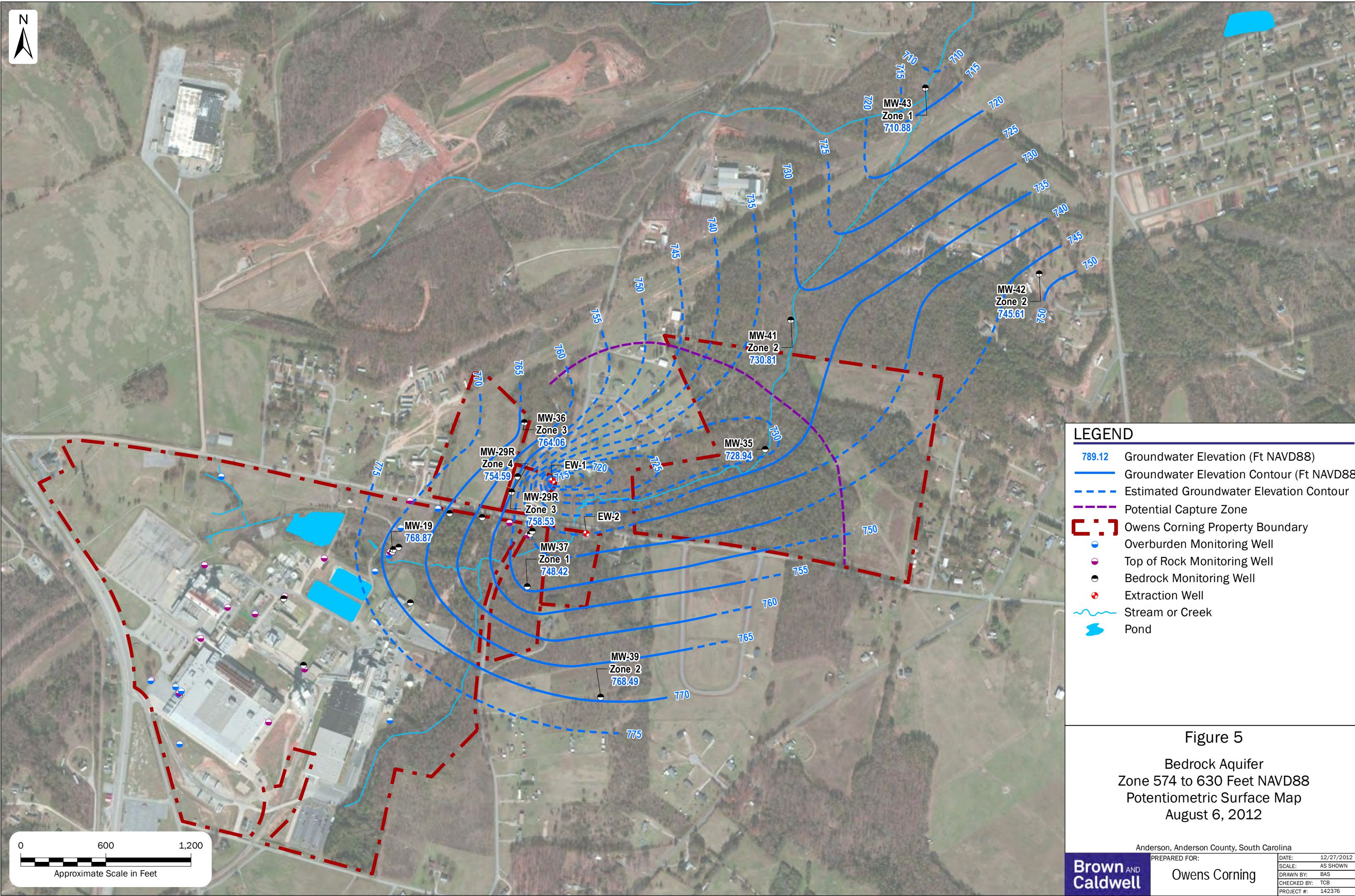
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- Groundwater Elevation Contour (Ft NAVD88)
- - - Estimated Groundwater Elevation Contour
- - - Potential Capture Zone
- - - Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

Figure 4
 Bedrock Aquifer
 Zone 632 to 699 Feet NAVD88
 Potentiometric Surface Map
 August 6, 2012



Anderson, Anderson County, South Carolina

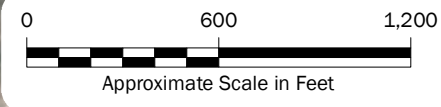
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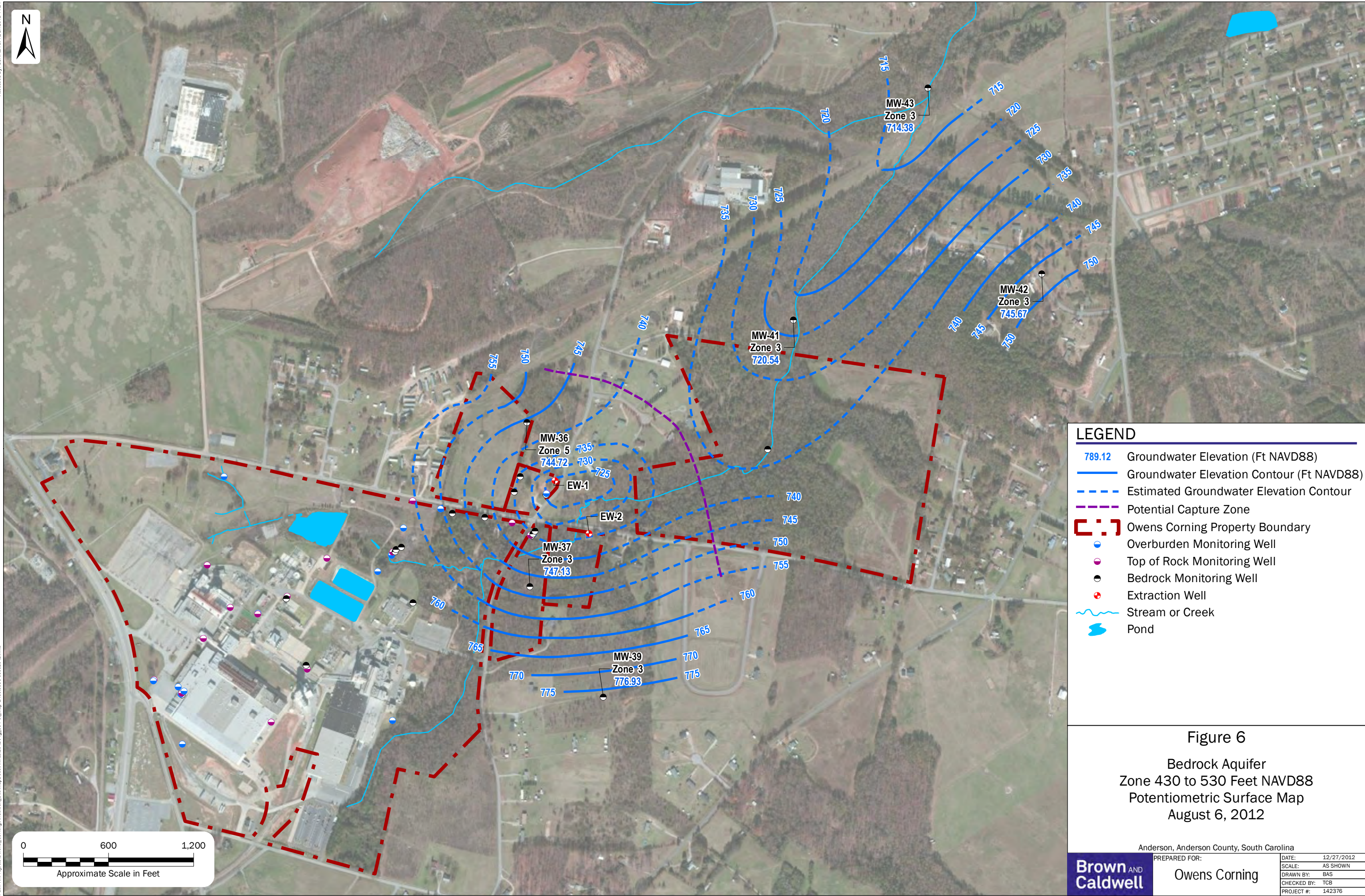
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- Groundwater Elevation Contour (Ft NAVD88)
- - - Estimated Groundwater Elevation Contour
- - - Potential Capture Zone
- - - Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

Figure 5
 Bedrock Aquifer
 Zone 574 to 630 Feet NAVD88
 Potentiometric Surface Map
 August 6, 2012



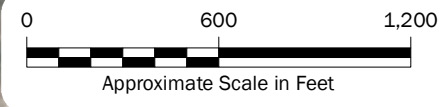
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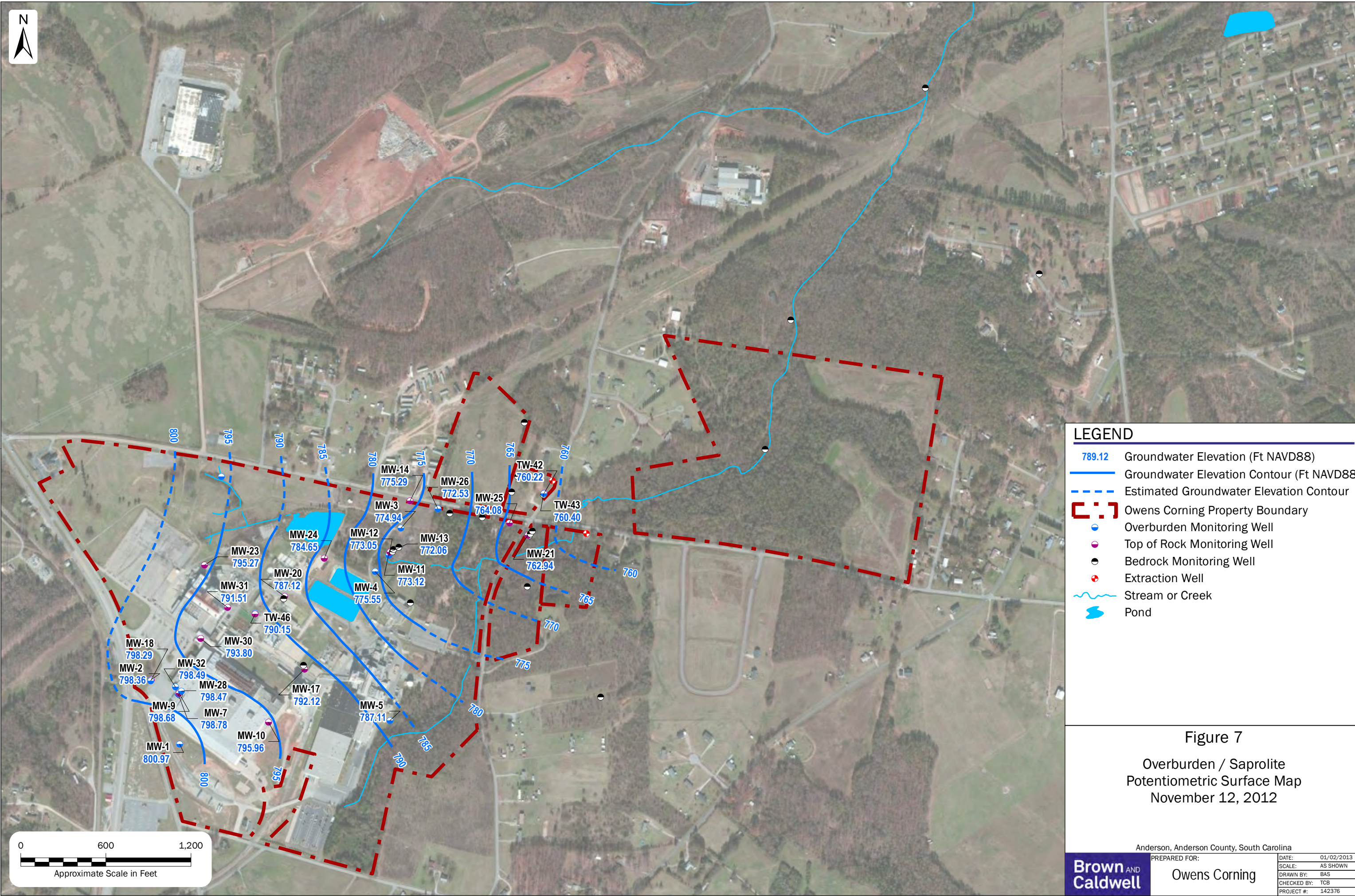
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- - - Potential Capture Zone
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- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

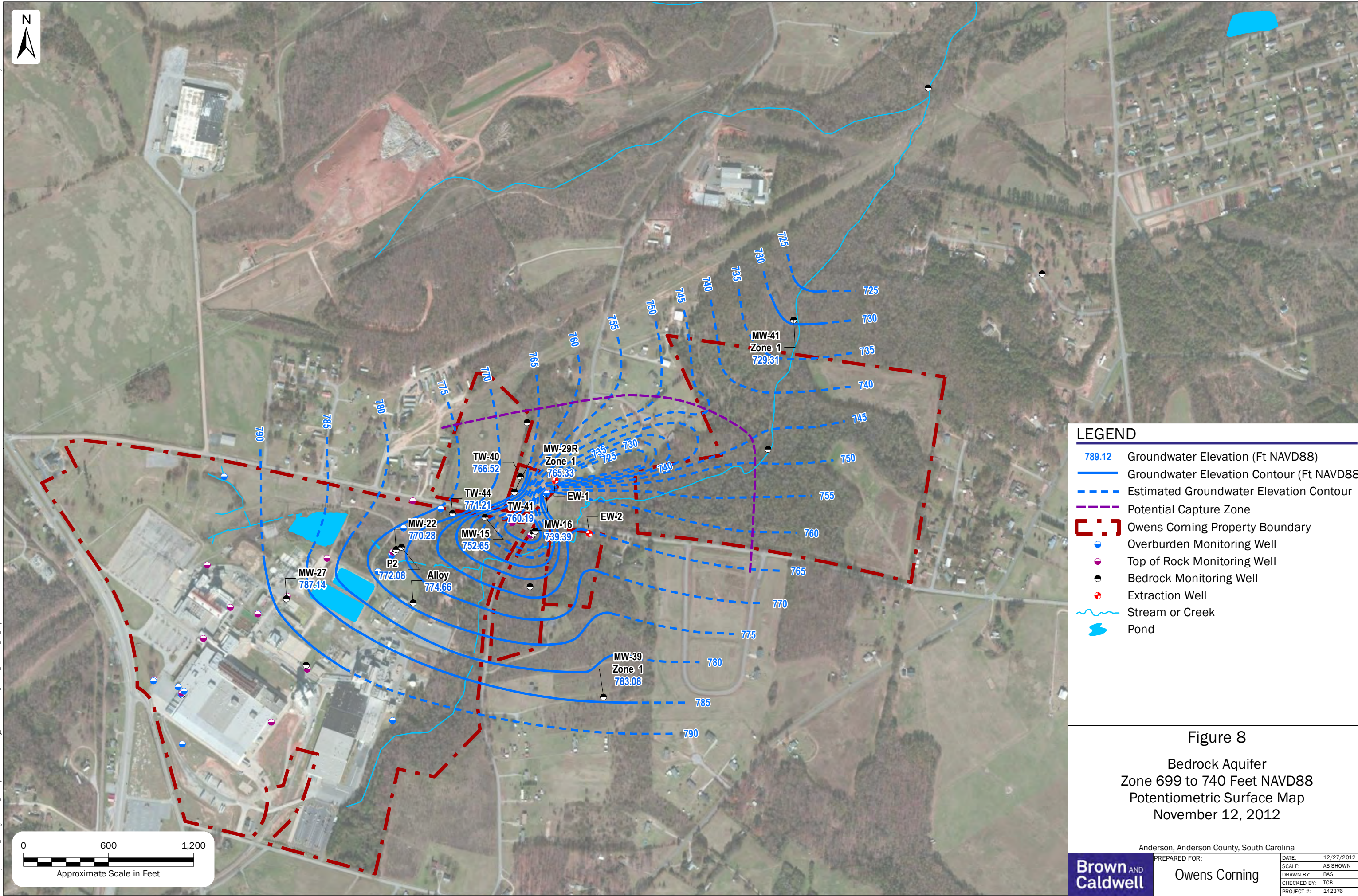
Figure 6
 Bedrock Aquifer
 Zone 430 to 530 Feet NAVD88
 Potentiometric Surface Map
 August 6, 2012



Anderson, Anderson County, South Carolina

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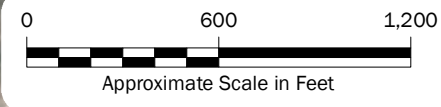




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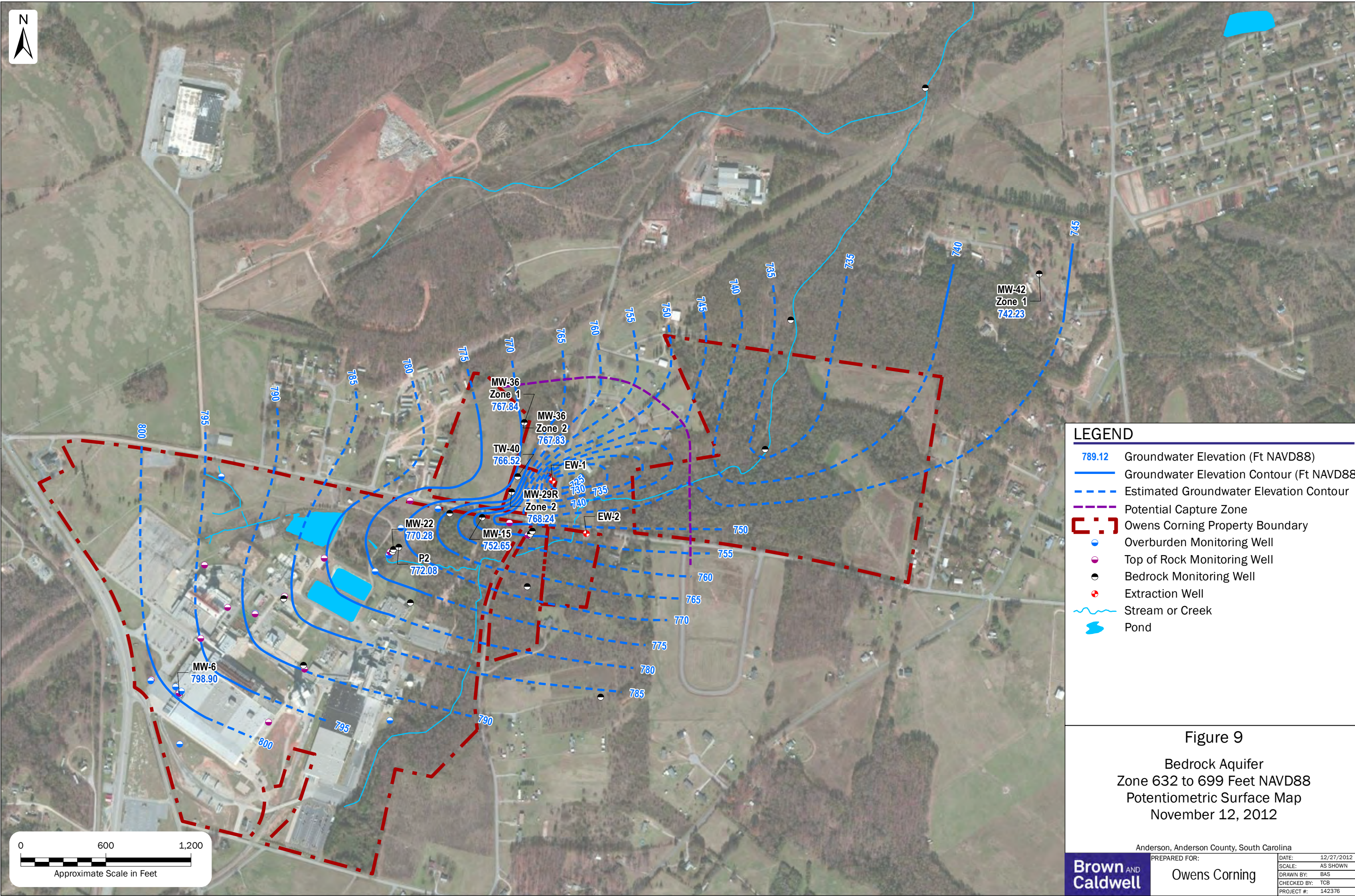
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- - - Potential Capture Zone
- - - Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

Figure 8
 Bedrock Aquifer
 Zone 699 to 740 Feet NAVD88
 Potentiometric Surface Map
 November 12, 2012



Anderson, Anderson County, South Carolina

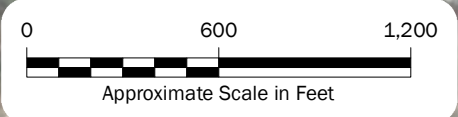
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	PROJECT #:	142376		



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- 789.12 Groundwater Elevation (Ft NAVD88)
- Groundwater Elevation Contour (Ft NAVD88)
- Estimated Groundwater Elevation Contour
- Potential Capture Zone
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

Figure 9
 Bedrock Aquifer
 Zone 632 to 699 Feet NAVD88
 Potentiometric Surface Map
 November 12, 2012

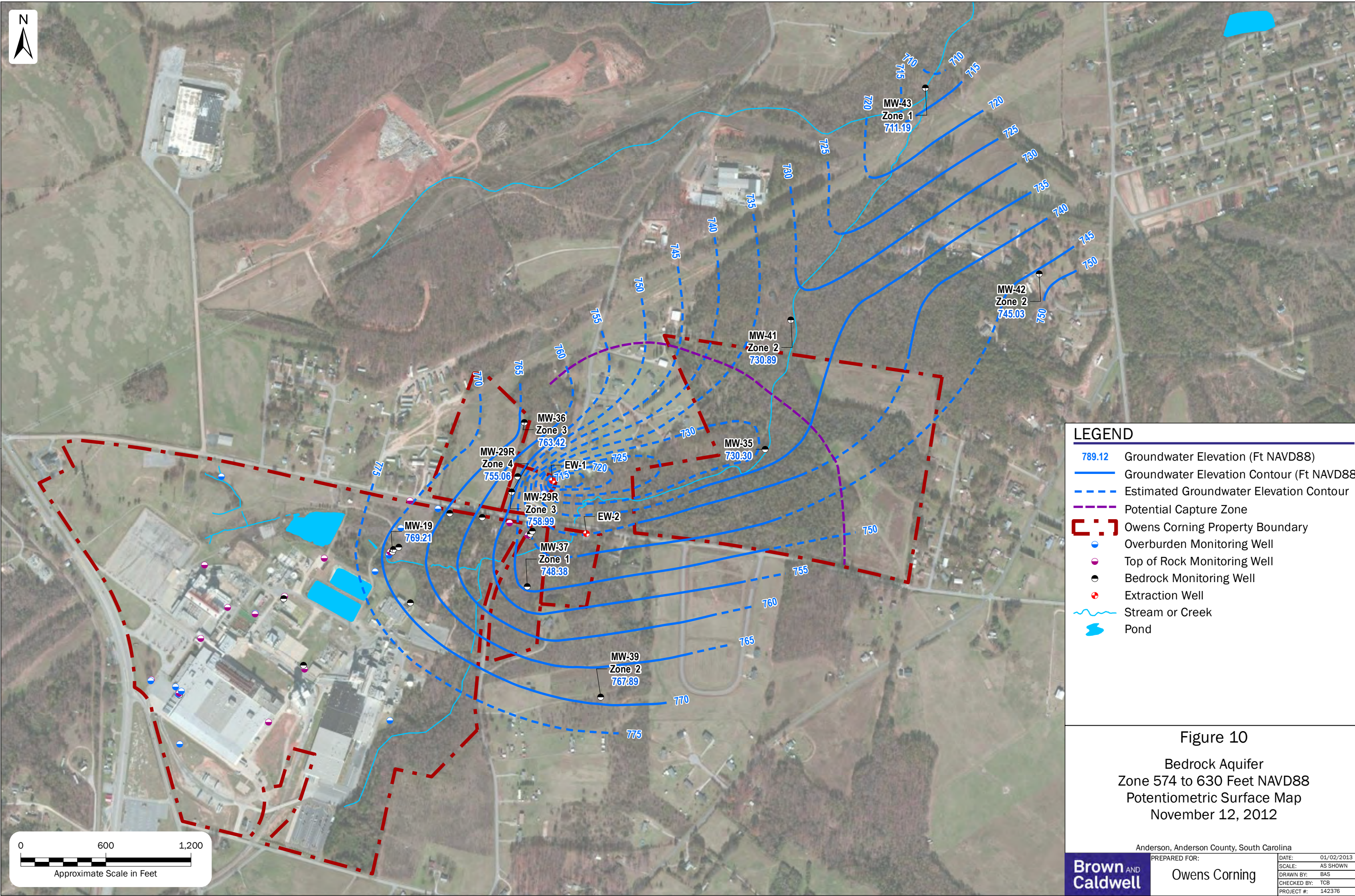


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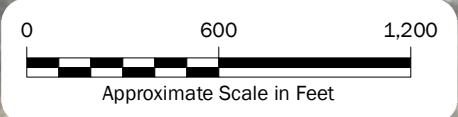
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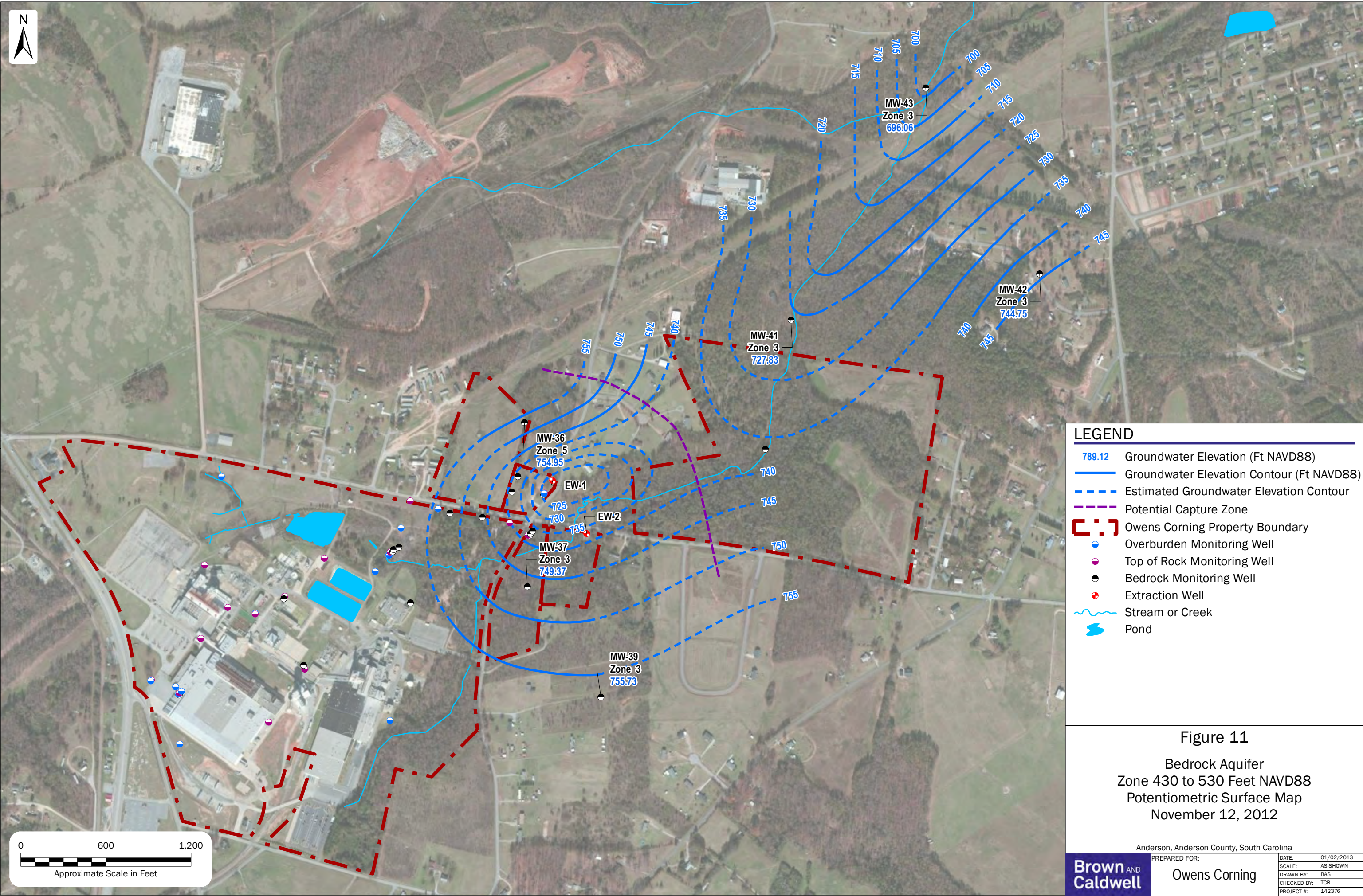
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- - - Estimated Groundwater Elevation Contour
- - - Potential Capture Zone
- - - Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

Figure 10
 Bedrock Aquifer
 Zone 574 to 630 Feet NAVD88
 Potentiometric Surface Map
 November 12, 2012



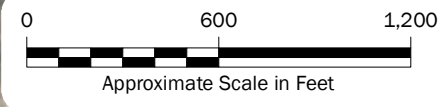
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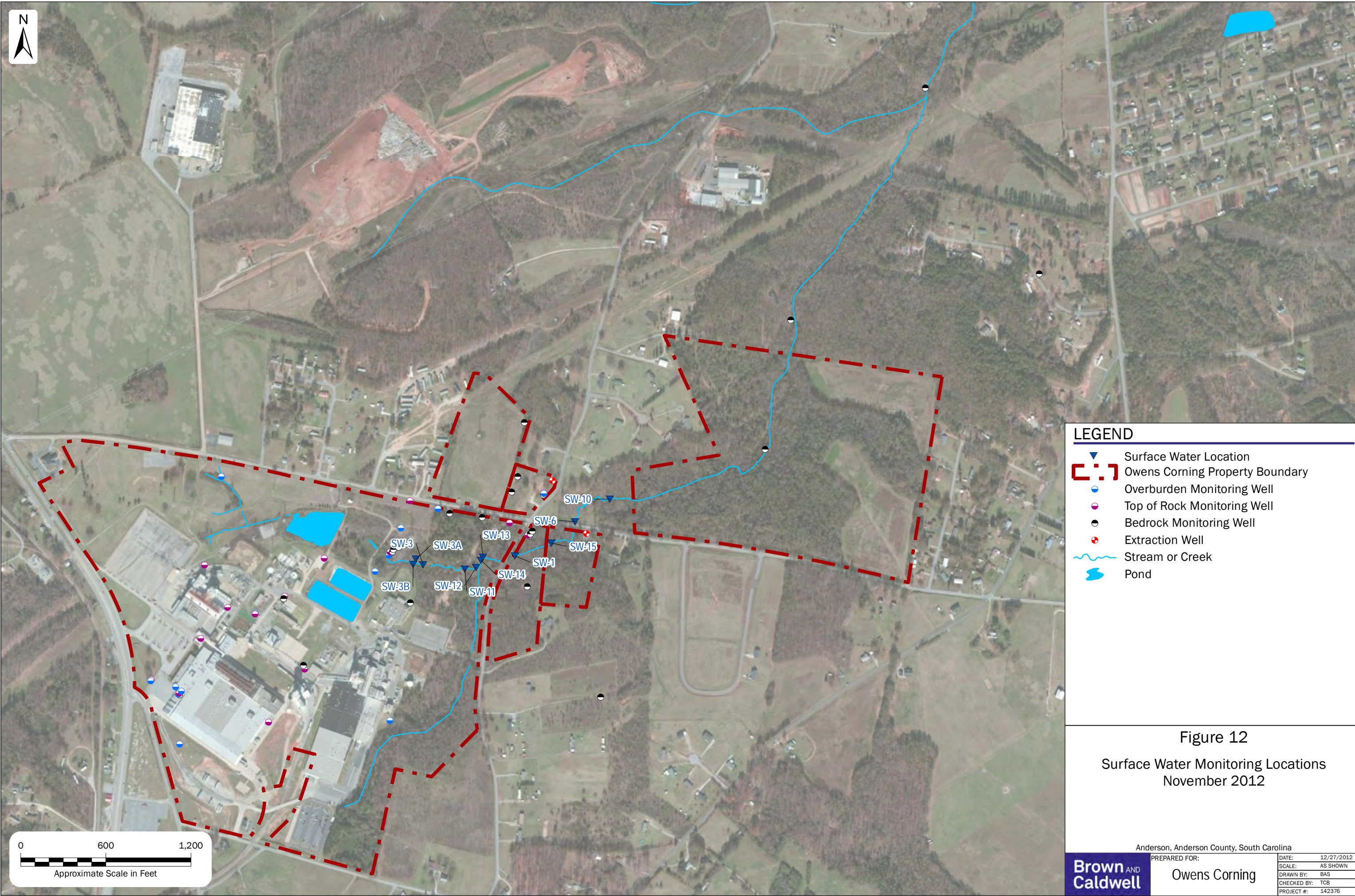
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- Groundwater Elevation Contour (Ft NAVD88)
- - - Estimated Groundwater Elevation Contour
- - - Potential Capture Zone
- - - Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

Figure 11
 Bedrock Aquifer
 Zone 430 to 530 Feet NAVD88
 Potentiometric Surface Map
 November 12, 2012



Anderson, Anderson County, South Carolina

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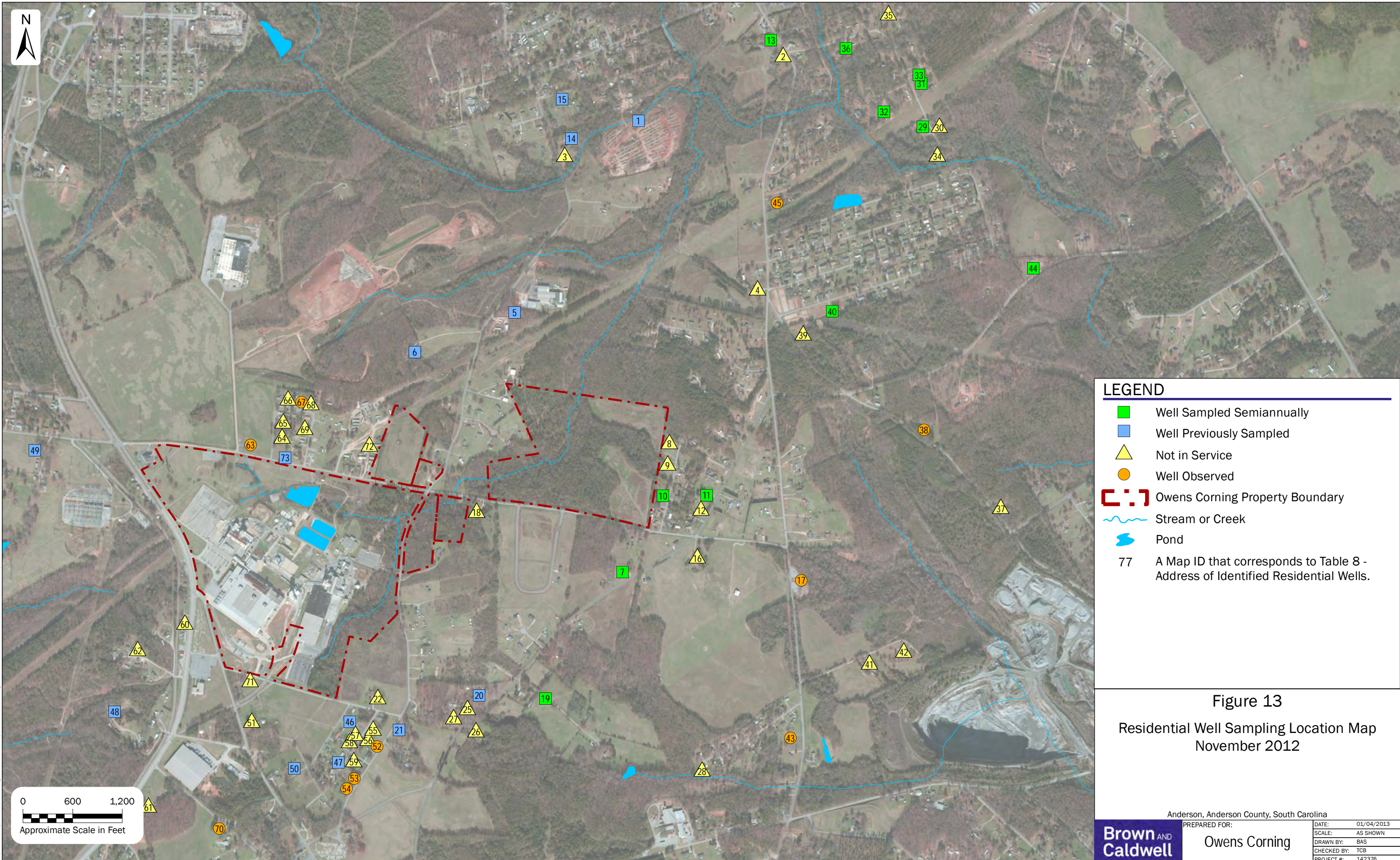
LEGEND

- Surface Water Location
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

Figure 12
Surface Water Monitoring Locations
November 2012

Anderson, Anderson County, South Carolina

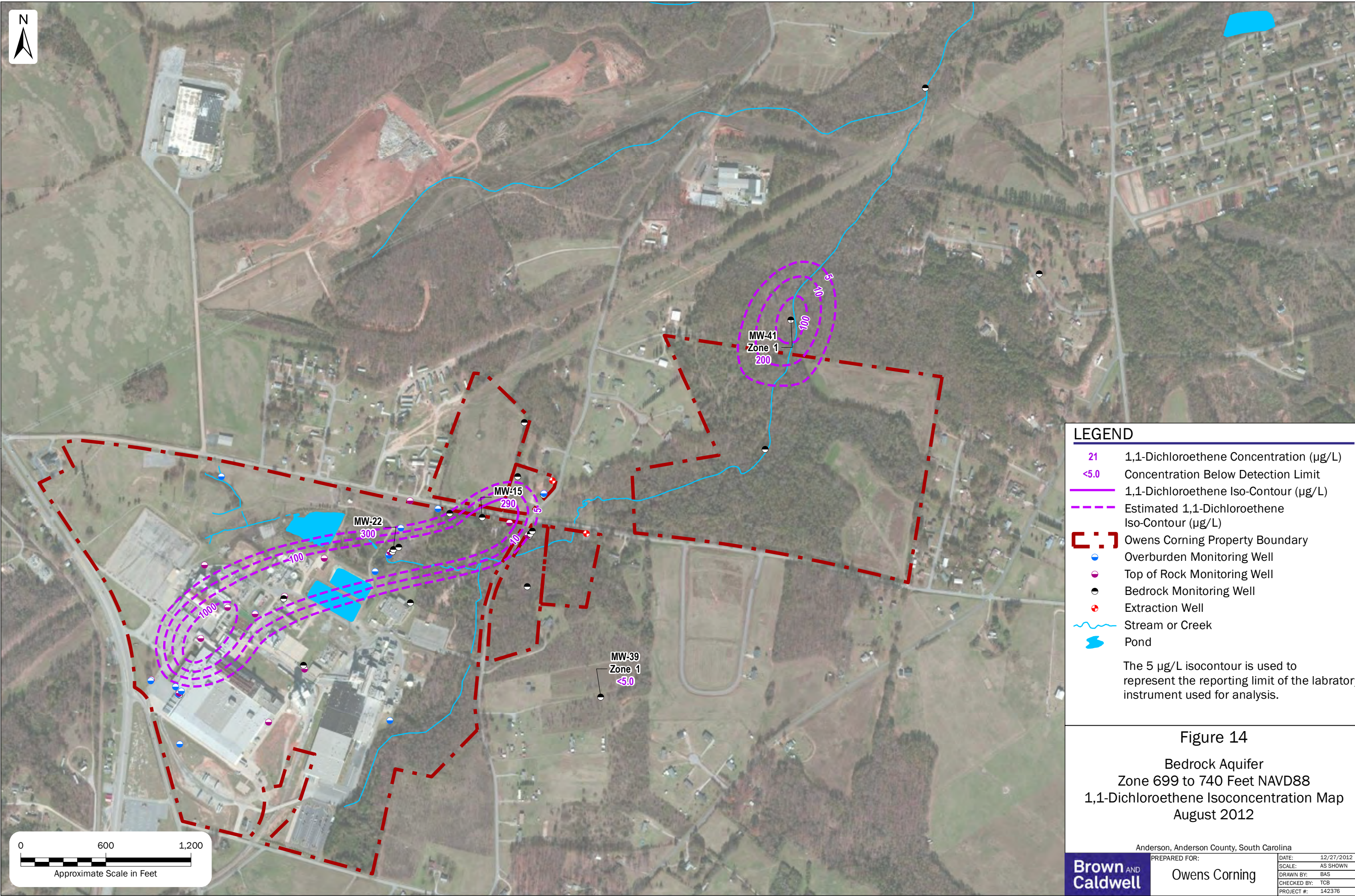
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	DRAWN BY:	BAS	CHECKED BY:	TCB
	CHECKED BY:	TCB	PROJECT #:	142376
	PROJECT #:	142376		



LEGEND

- Well Sampled Semiannually
- Well Previously Sampled
- ▲ Not in Service
- Well Observed
- - - Owens Corning Property Boundary
- ~ Stream or Creek
- ☾ Pond
- 77 A Map ID that corresponds to Table 8 - Address of Identified Residential Wells.

Figure 13
Residential Well Sampling Location Map
November 2012

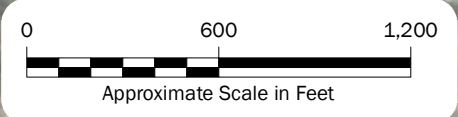


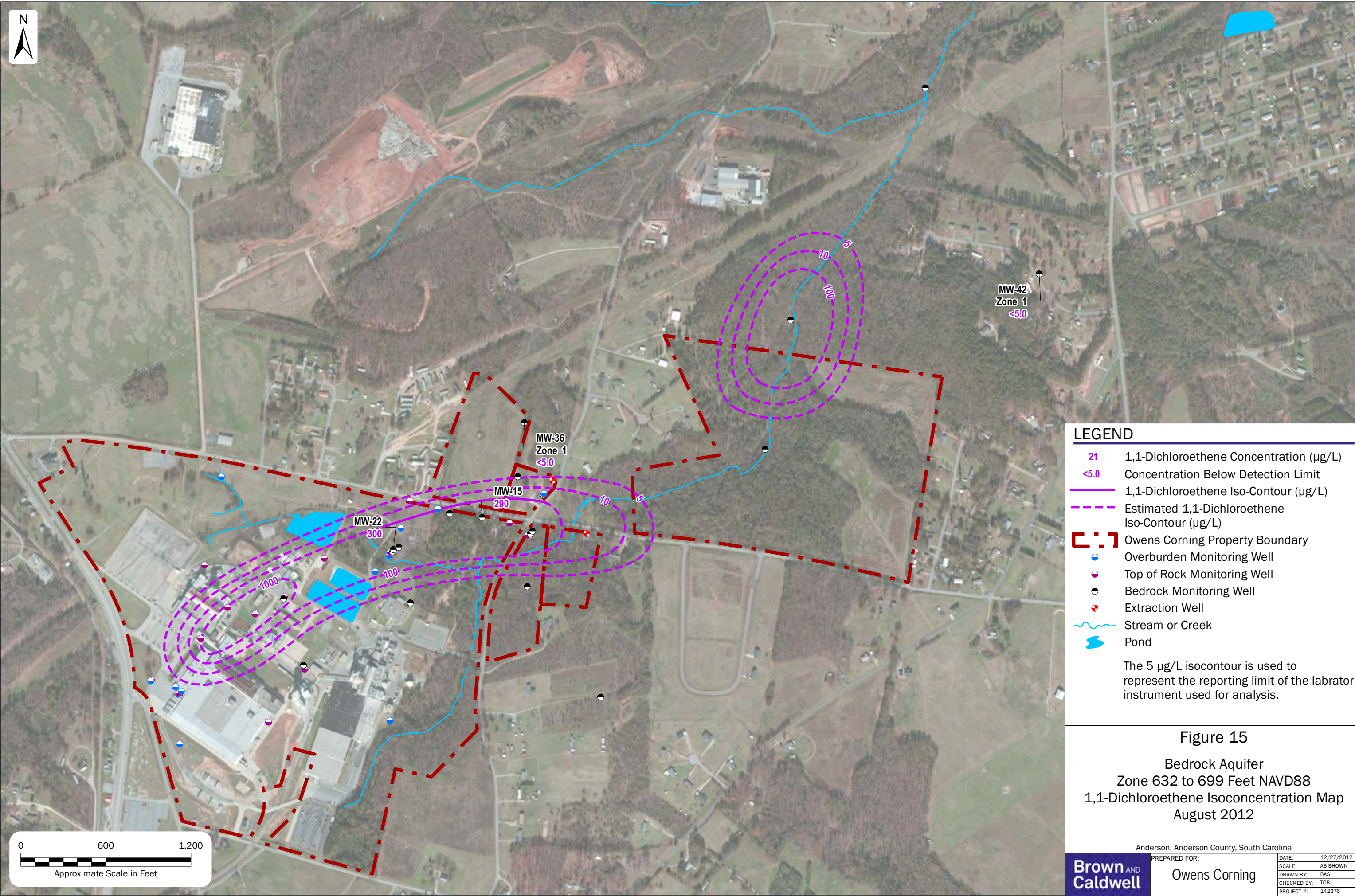
LEGEND

- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 14
 Bedrock Aquifer
 Zone 699 to 740 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 August 2012





LEGEND

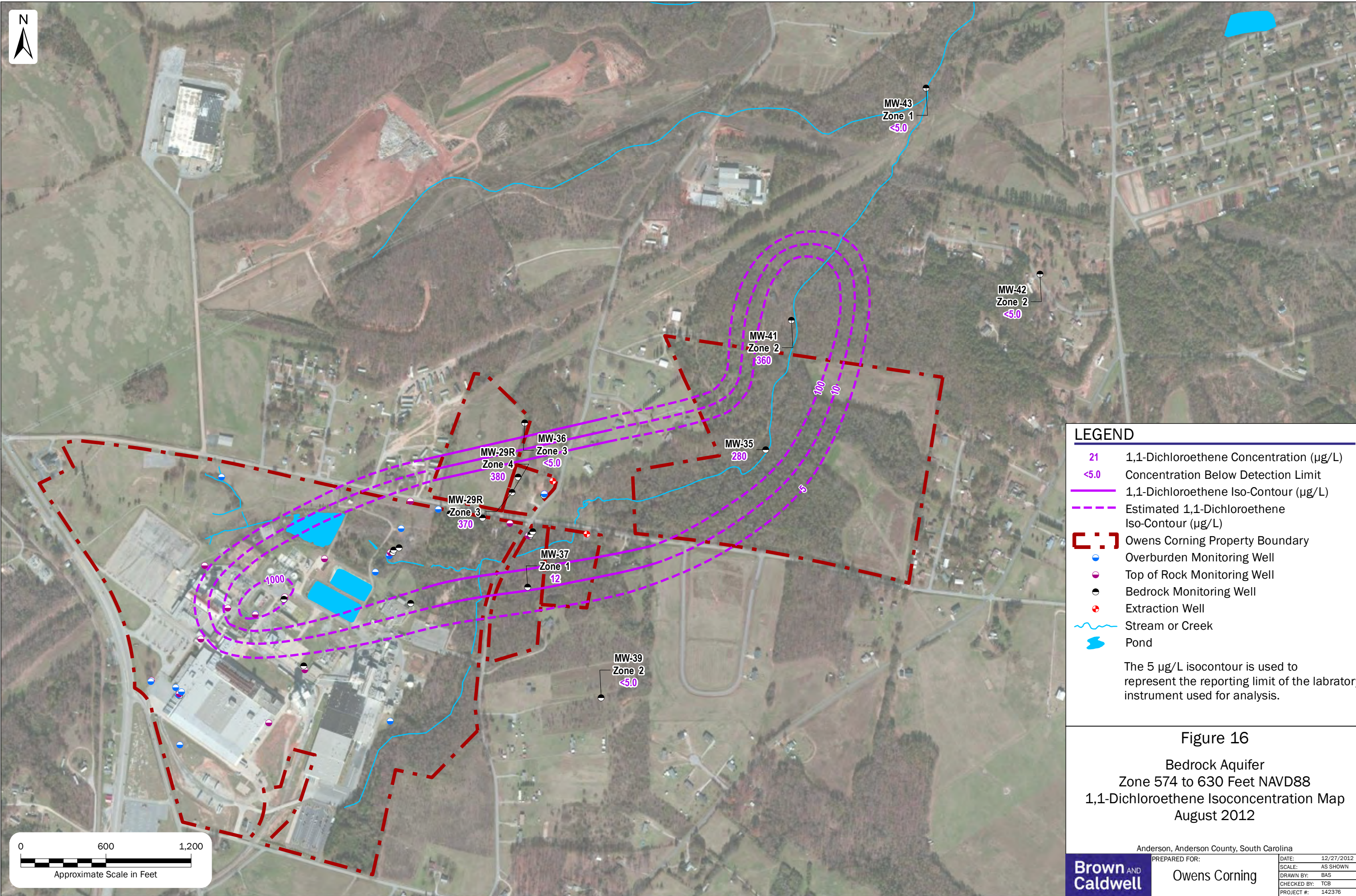
- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 15
 Bedrock Aquifer
 Zone 632 to 699 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 August 2012

Anderson, Anderson County, South Carolina

Brown AND Caldwell	PREPARED FOR:	Owens Corning	DATE:	12/27/2012
	SCALE:	AS SHOWN	DRAWN BY:	BAS
	CHECKED BY:	TCB	PROJECT #:	142376

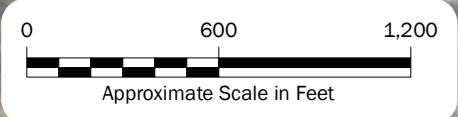


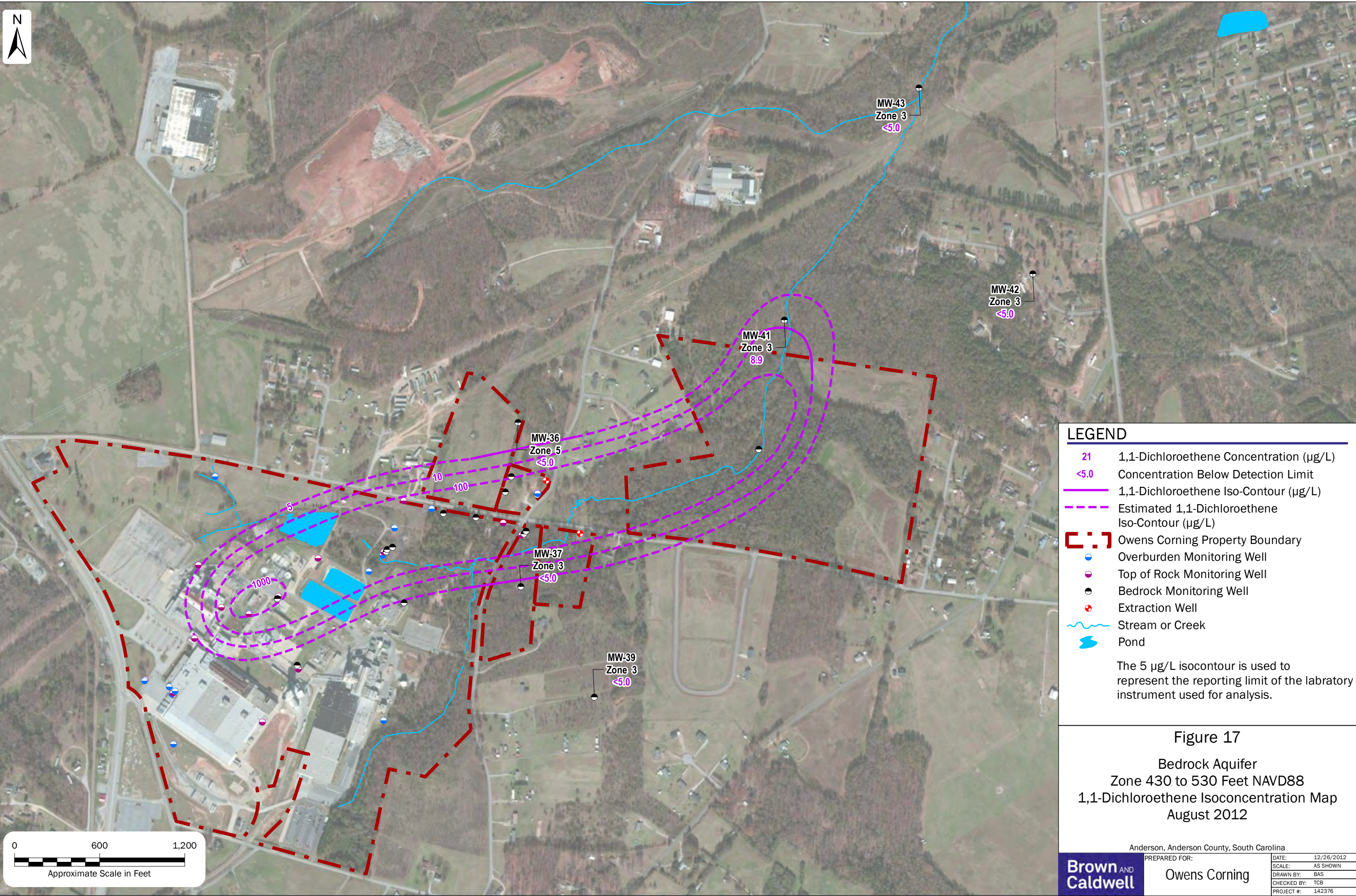
LEGEND

- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 16
 Bedrock Aquifer
 Zone 574 to 630 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 August 2012



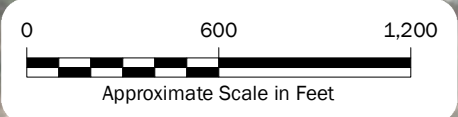


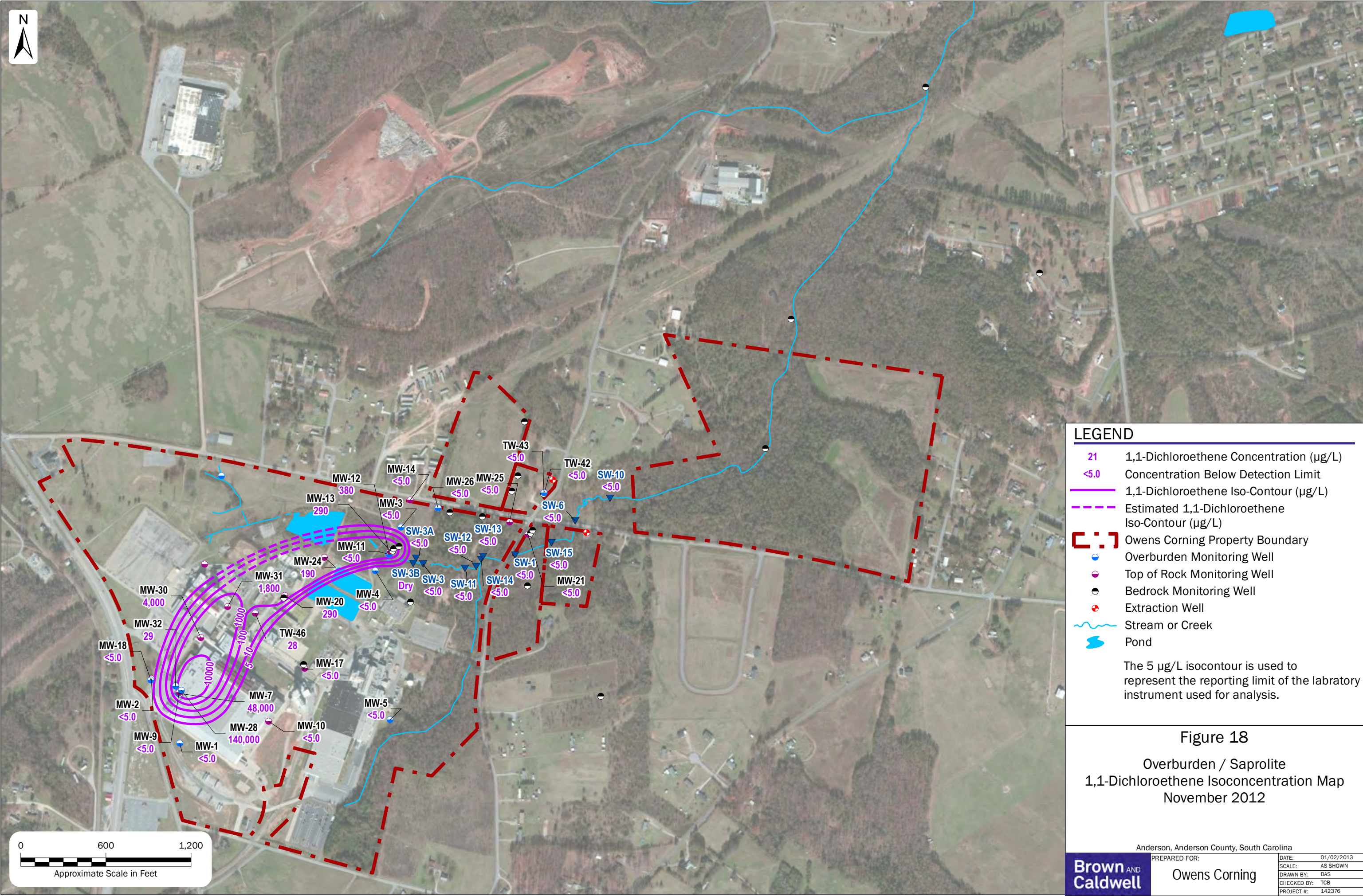
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- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- - - Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- [Red dashed line] Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 17
 Bedrock Aquifer
 Zone 430 to 530 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 August 2012





LEGEND

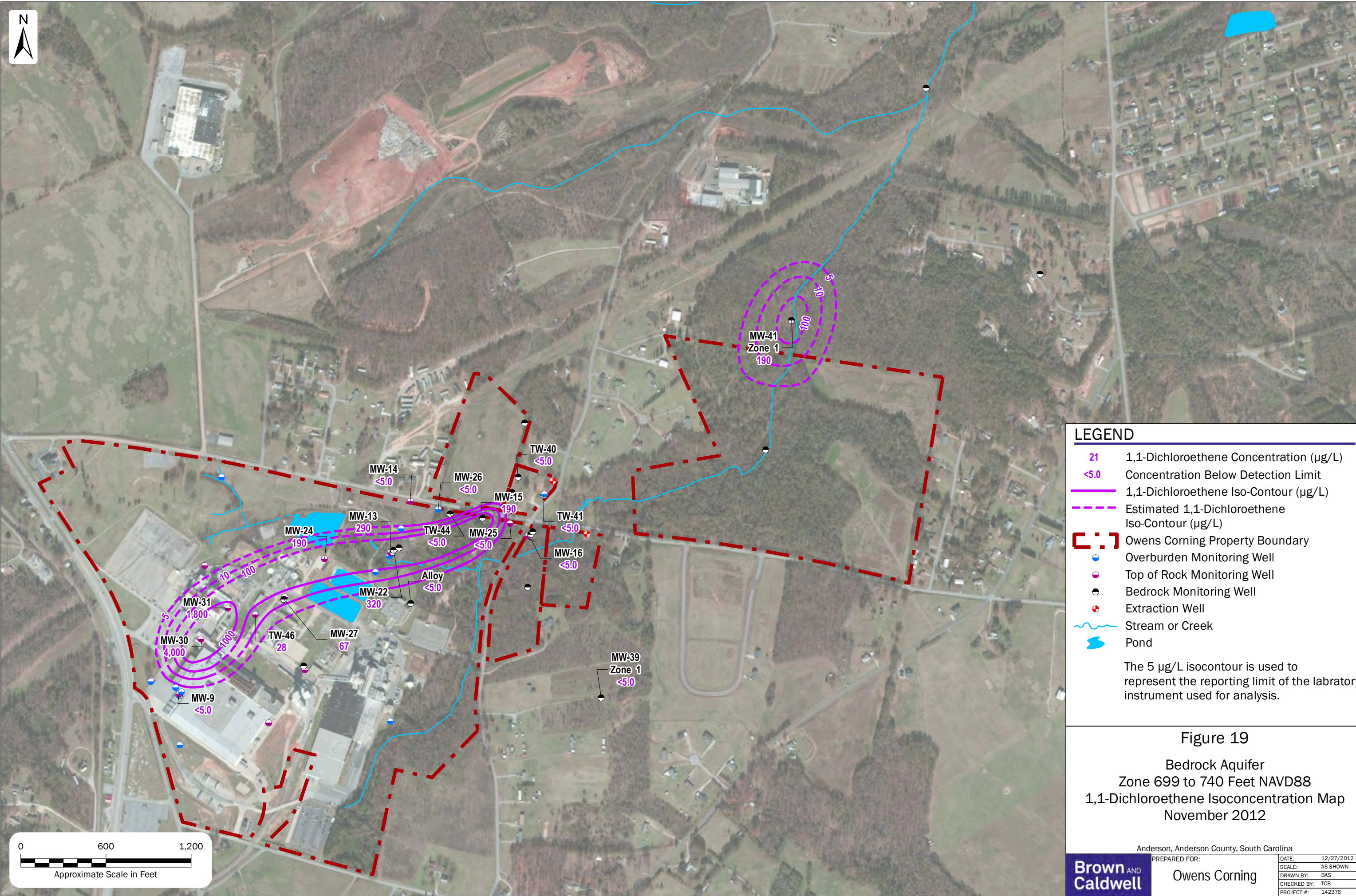
- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 18
 Overburden / Saprolite
 1,1-Dichloroethene Isoconcentration Map
 November 2012

Anderson, Anderson County, South Carolina

Brown AND Caldwell	PREPARED FOR:	Owens Corning	
	DATE:	01/02/2013	
	SCALE:	AS SHOWN	
	DRAWN BY:	BAS	
	CHECKED BY:	TCB	
		PROJECT #:	142376



LEGEND

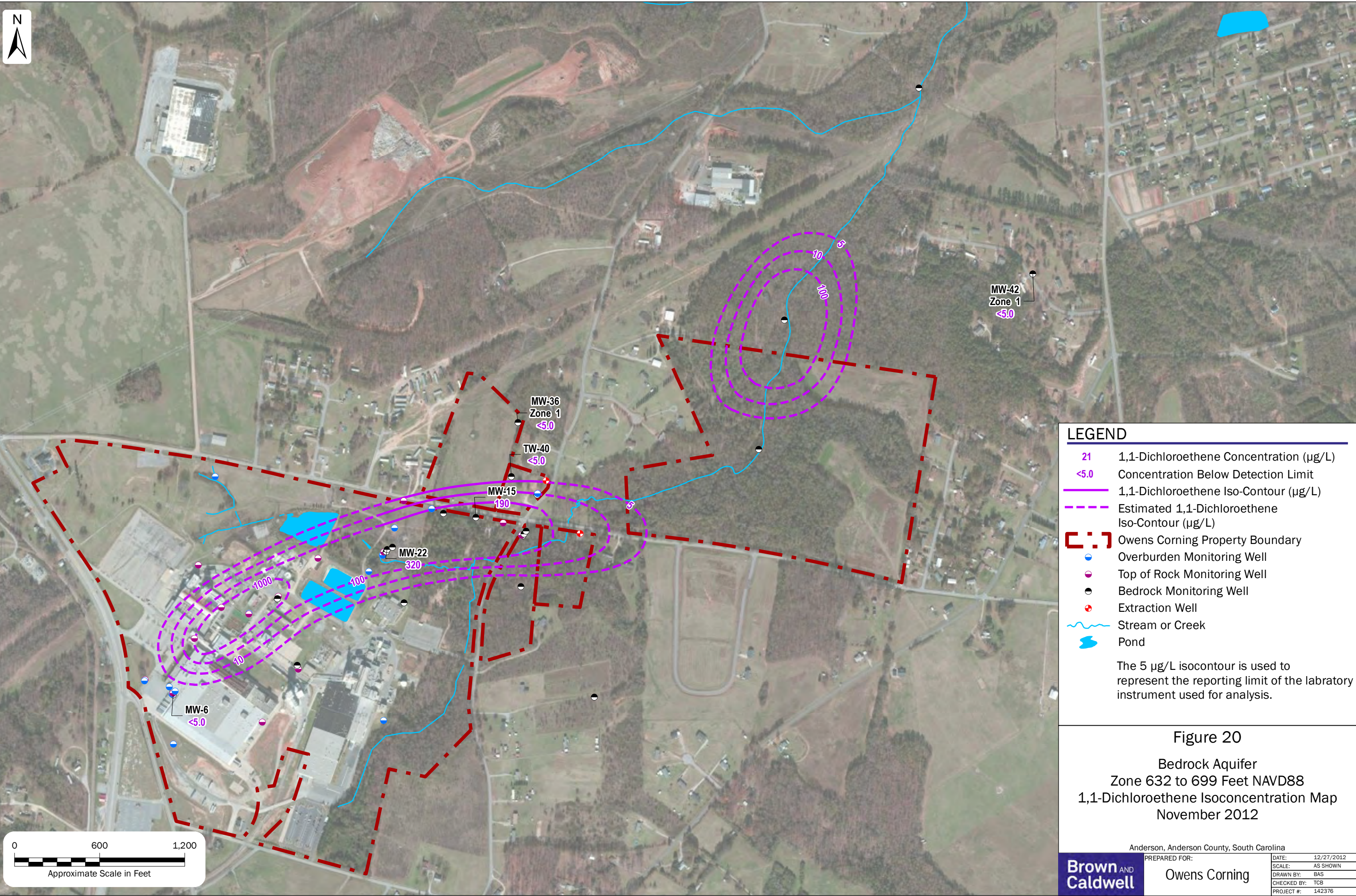
- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- - - Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- [Red dashed line] Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- ⊕ Extraction Well
- ~ Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 19
 Bedrock Aquifer
 Zone 699 to 740 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 November 2012

Anderson, Anderson County, South Carolina

Brown AND Caldwell	PREPARED FOR:	Owens Corning	DATE:	12/27/2012
	SCALE:	AS SHOWN	DRAWN BY:	BAS
	CHECKED BY:	TCB	PROJECT #:	142376



LEGEND

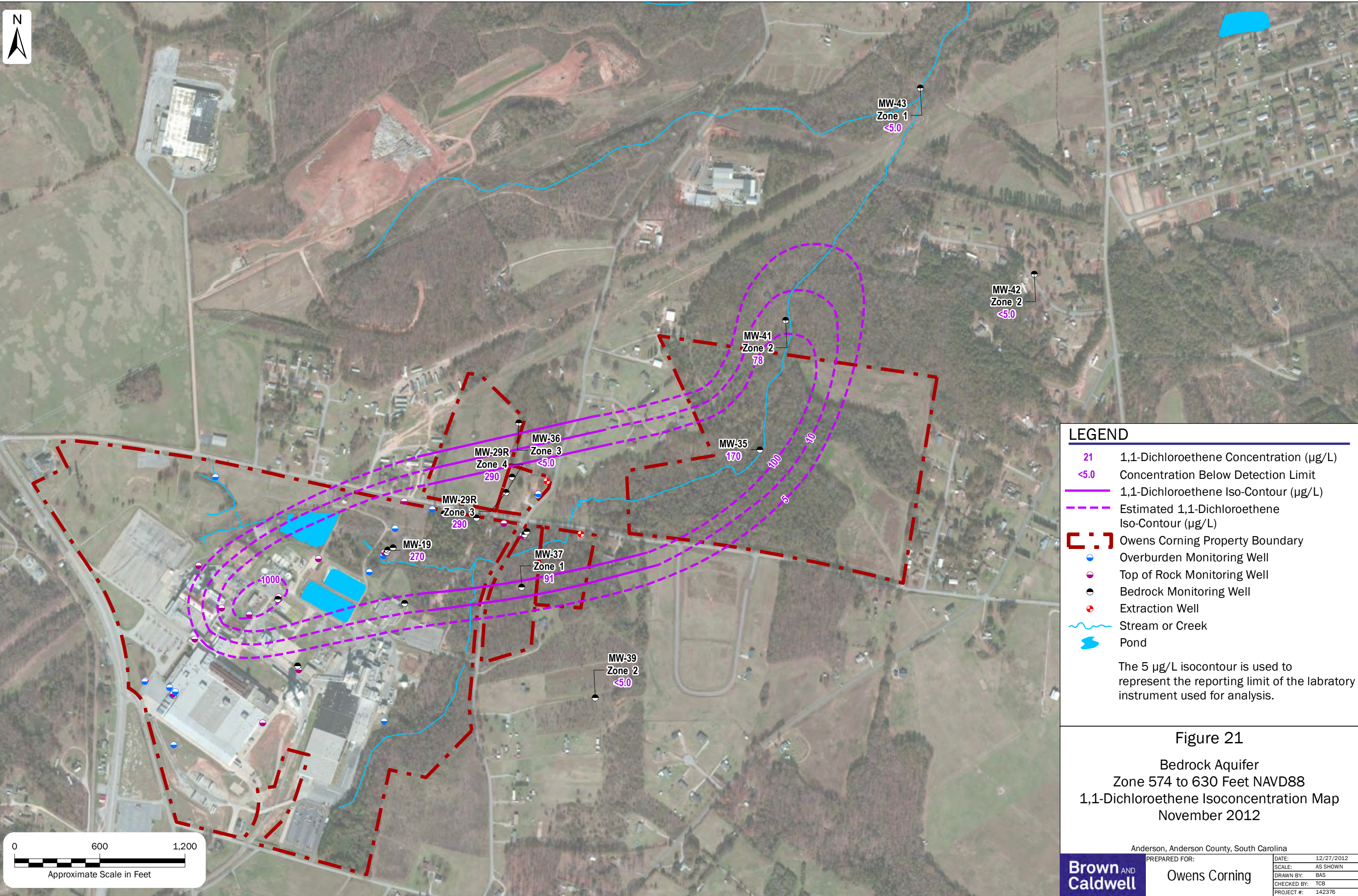
- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 20
 Bedrock Aquifer
 Zone 632 to 699 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 November 2012

Anderson, Anderson County, South Carolina
 PREPARED FOR: Owens Corning

Brown AND Caldwell	DATE:	12/27/2012
	SCALE:	AS SHOWN
	DRAWN BY:	BAS
	CHECKED BY:	TCB
	PROJECT #:	142376

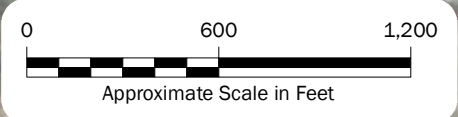


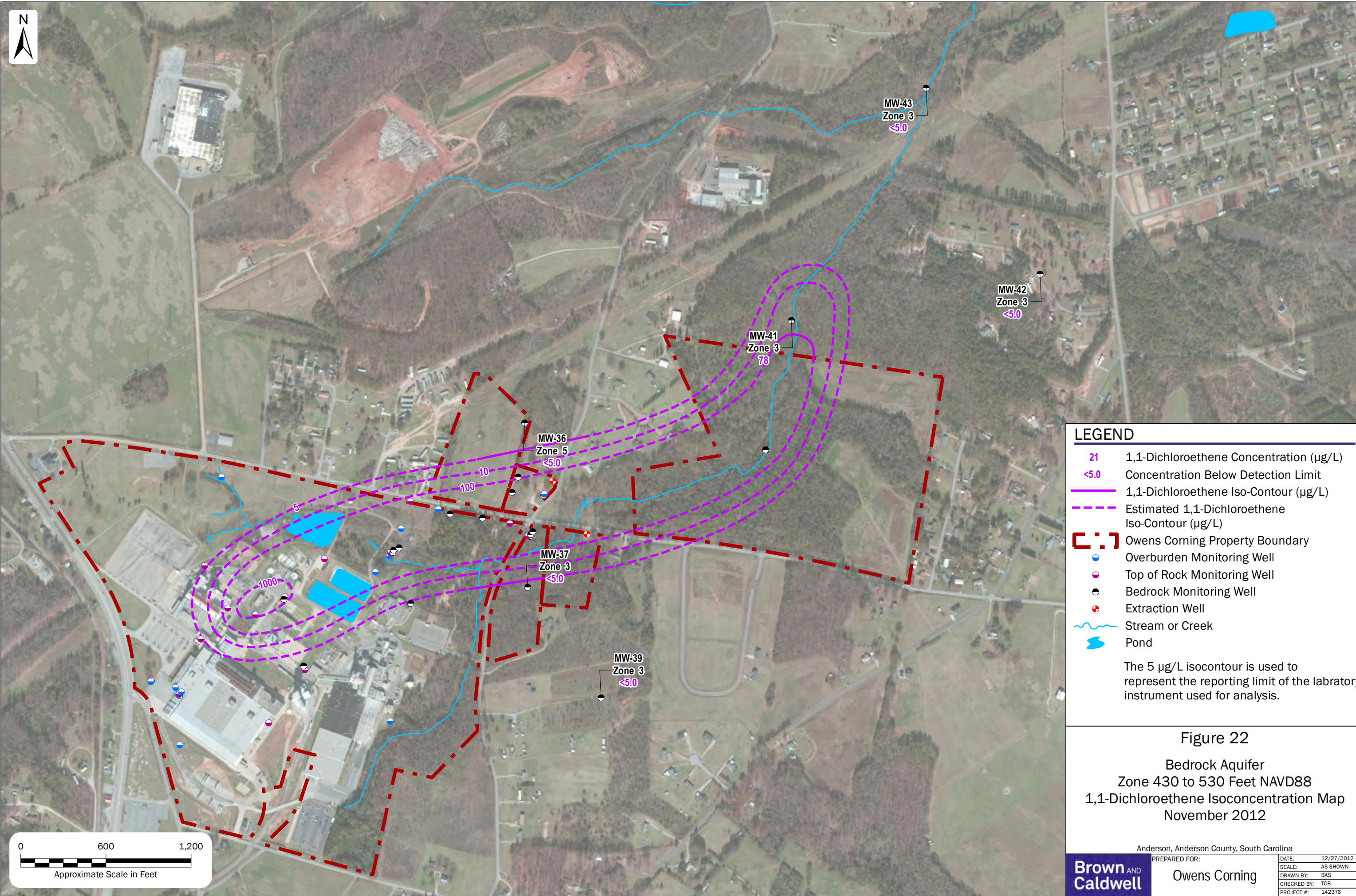
LEGEND

- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- - - Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- [Red Dashed Line] Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 21
 Bedrock Aquifer
 Zone 574 to 630 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 November 2012





LEGEND

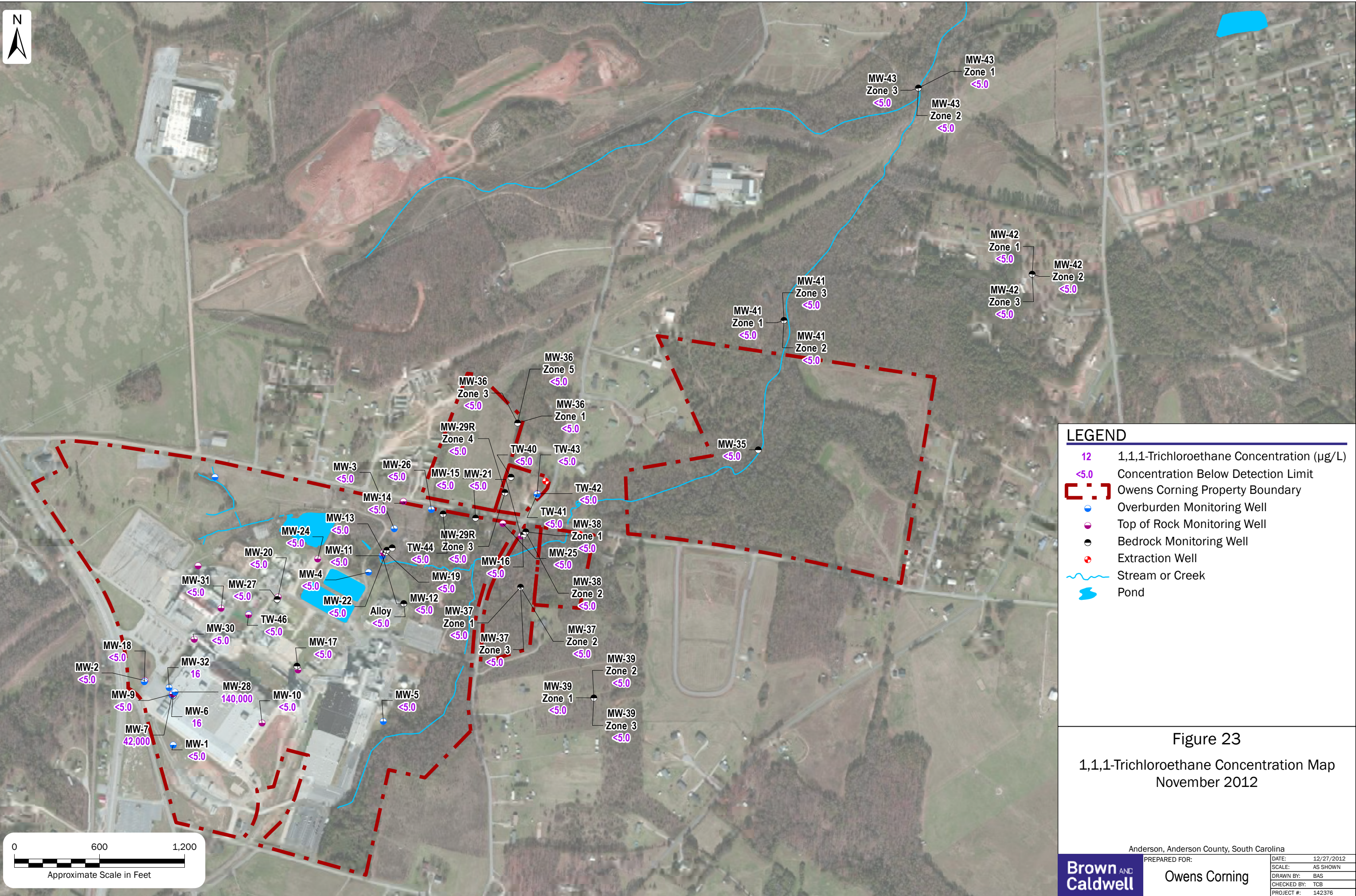
- 21 1,1-Dichloroethene Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- 1,1-Dichloroethene Iso-Contour (µg/L)
- - - Estimated 1,1-Dichloroethene Iso-Contour (µg/L)
- [Red dashed line] Owens Corning Property Boundary
- Overburden Monitoring Well
- Top of Rock Monitoring Well
- Bedrock Monitoring Well
- Extraction Well
- ~ Stream or Creek
- Pond

The 5 µg/L isocontour is used to represent the reporting limit of the laboratory instrument used for analysis.

Figure 22
 Bedrock Aquifer
 Zone 430 to 530 Feet NAVD88
 1,1-Dichloroethene Isoconcentration Map
 November 2012

Anderson, Anderson County, South Carolina

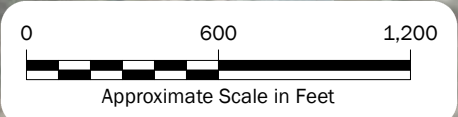
Brown AND Caldwell	PREPARED FOR:	Owens Corning	DATE:	12/27/2012
	SCALE:	AS SHOWN	DRAWN BY:	BAS
	CHECKED BY:	TCB	PROJECT #:	142376



LEGEND

- 12 1,1,1-Trichloroethane Concentration (µg/L)
- <5.0 Concentration Below Detection Limit
- [Red dashed line] Owens Corning Property Boundary
- [Blue circle with dot] Overburden Monitoring Well
- [Purple circle with dot] Top of Rock Monitoring Well
- [Black circle with dot] Bedrock Monitoring Well
- [Red circle with dot] Extraction Well
- [Blue wavy line] Stream or Creek
- [Blue irregular shape] Pond

Figure 23
 1,1,1-Trichloroethane Concentration Map
 November 2012



Anderson, Anderson County, South Carolina

Brown AND Caldwell PREPARED FOR: **Owens Corning**

DATE:	12/27/2012
SCALE:	AS SHOWN
DRAWN BY:	BAS
CHECKED BY:	TCB
PROJECT #:	142376

Table 1. Quarterly Sampling Groundwater Elevation Data - August 6, 2012
Owens Corning - Anderson, SC

Monitoring Well	Screen Interval (ft bgs)	Screened Interval Location	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)	Static Depth to Water (ft Below TOC) 8/06/2012	Static Water Elevation, (ft NAVD88) 8/06/2012
MW-3	13-28	O	795.61	796.76	21.29	775.47
MW-4	14.7-29.7	O	796.72	798.38	24.84	773.54
MW-6	123.6-133.6	BR	819.82	819.69	20.38	799.31
MW-11	6.0-16.0	O	778.32	780.22	7.16	773.06
MW-12	23-33	O	778.42	780.95	7.89	773.06
MW-13	67-72	TOR	779.20	782.22	10.15	772.07
MW-14	69.2-74.2	TOR	796.39	798.45	22.35	776.10
MW-15	69.5-99.5	BR	777.11	779.45	26.15	753.30
MW-16	49-59	BR	768.14	770.37	11.47	758.90
MW-19	154-169	BR	779.69	781.81	12.94	768.87
MW-21	6.5-16.5	TOR	768.63	771.15	8.40	762.75
MW-22	78-116	BR	780.45	782.65	12.39	770.26
MW-23	83-93	TOR	808.97	811.47	15.71	795.76
MW-25	40-50	TOR	774.40	776.71	12.78	763.93
MW-26	56.7-66.7	O	790.40	793.09	19.75	773.34
MW-27	69-99	BR	808.93	811.13	23.82	787.31
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	21.31	765.72
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	18.00	769.03
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	28.50	758.53
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	32.44	754.59
MW-35 ^a	152-162	BR	740.90	743.73	14.79	728.94
MW-36 Zone 1	99.1-116	BR	783.00	785.63	16.90	768.73
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	16.88	768.75
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	21.57	764.06
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	22.73	762.90
MW-36 Zone 5	269.9-275	BR	783.00	785.63	40.91	744.72
MW-37 Zone 1	185-195	BR	780.20	782.92	34.50	748.42
MW-37 Zone 2	222-232	BR	780.20	782.84	30.85	751.99
MW-37 Zone 3	257-272	BR	780.20	782.79	35.66	747.13
MW-38 Zone 1	415-430	BR	768.10	771.23	5.87	765.36
MW-38 Zone 2 ^{a,b}	479.6-499.6	BR	768.10	771.18	-0.83	772.01
MW-39 Zone 1	95-105	BR	804.10	806.20	21.93	784.27
MW-39 Zone 2	195-215	BR	804.10	806.20	37.71	768.49
MW-39 Zone 3	280-300	BR	804.10	806.20	29.27	776.93
MW-41 Zone 1	17-32	BR	733.40	736.56	7.36	729.20
MW-41 Zone 2 ^a	109-129	BR	733.40	736.79	5.98	730.81
MW-41 Zone 3	279-299	BR	733.40	736.77	16.23	720.54
MW-42 Zone 1	114-129	BR	785.50	785.44	42.30	743.14
MW-42 Zone 2	202-222	BR	785.50	785.42	39.81	745.61
MW-42 Zone 3	265-285	BR	785.50	785.40	39.73	745.67
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	8.31	710.88
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	5.90	713.30
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	4.79	714.38
EW-1	52 - 445	BR	775.30	778.04	350.20	427.84
EW-2	9.5 - 295	BR	768.20	769.96	38.00	731.96
P1	24.5-39.5	BR	813.10	815.42	23.21	792.21
P2	53-115	BR	783.93	785.65	14.52	771.13
Alloy	56-61	BR	789.56	791.69	16.93	774.76
TW-40	84-94	BR	785.81	788.63	21.10	767.53
TW-41	50.3-55.3	BR	775.50	778.84	18.01	760.83
TW-42	21-26	TOR	775.86	778.09	17.53	760.56
TW-43	8.6-18.6	O	775.82	778.15	17.39	760.76
TW-44	64-74	BR	782.68	785.52	13.61	771.91
TW-45 ^c	18.8-28.8	O	816.70	816.76	NG	NG
TW-46	83.3-88.3	TOR	816.72	816.58	26.15	790.43

bgs - below ground surface

BR - bedrock

NG - not gauged

O - overburden

TOR - top of rock

TOC - top of casing

NAVD88 - North American Vertical Datum of 1988

ft bgs - feet below ground surface

a - The TOC elevation for MW-35, MW-38 Zone 2, and MW-41 Zone 2 has been adjusted by adding artesian flow fixtures to surveyed TOC Elevations. Values in this table have been adjusted accordingly.

b - Static depth to water readings at artesian well (MW-38 Zone 2) were measured by attaching pressure gauge to top of ball valve, these values are indicated by the "-" before the measured value.

c - Well collapsed.

Table 2. Annual Sampling Groundwater Elevation Data - November 12, 2012
Owens Corning - Anderson, SC

Monitoring Well	Screen Interval (ft bgs)	Screened Interval Location	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)	Static Depth to Water (ft Below TOC) 11/12/2012	Static Water Elevation, (ft NAVD88) 11/12/2012
MW-1	55-65	O	824.27	826.62	25.65	800.97
MW-2	56.7-66.7	TOR	820.26	822.68	24.32	798.36
MW-3	13-28	O	795.61	796.76	21.82	774.94
MW-4	14.7-29.7	O	796.72	798.38	22.83	775.55
MW-5	12.0-27.0	O	804.74	806.50	19.39	787.11
MW-6	123.6-133.6	BR	819.82	819.69	20.79	798.90
MW-7	15.9-30.9	O	819.70	819.27	20.49	798.78
MW-8	5.5-20.5	O	799.29	801.56	NG	NG
MW-9	94-104	TOR	819.75	819.41	20.73	798.68
MW-10	61.4-71.4	TOR	823.92	823.65	27.69	795.96
MW-11	6.0-16.0	O	778.32	780.22	7.10	773.12
MW-12	23-33	O	778.42	780.95	7.90	773.05
MW-13	67-72	TOR	779.20	782.22	10.16	772.06
MW-14	69.2-74.2	TOR	796.39	798.45	23.16	775.29
MW-15	69.5-99.5	BR	777.11	779.45	26.80	752.65
MW-16	49-59	BR	768.14	770.37	30.98	739.39
MW-17	24.1-39.1	TOR	813.66	816.07	23.95	792.12
MW-18	10.6-25.6	O	820.36	822.71	24.42	798.29
MW-19	154-169	BR	779.69	781.81	12.60	769.21
MW-20	57-67	TOR	808.70	810.95	23.83	787.12
MW-21	6.5-16.5	TOR	768.63	771.15	8.21	762.94
MW-22	78-116	BR	780.45	782.65	12.37	770.28
MW-23	83-93	TOR	808.97	811.47	16.20	795.27
MW-24	61-71	TOR	796.50	796.26	11.61	784.65
MW-25	40-50	TOR	774.40	776.71	12.63	764.08
MW-26	56.7-66.7	O	790.40	793.09	20.56	772.53
MW-27	69-99	BR	808.93	811.13	23.99	787.14
MW-28	21-31	O	819.97	819.77	21.30	798.47
MW-29R Zone 1	56.7-69.8	BR	784.90	787.03	21.70	765.33
MW-29R Zone 2	127.3-139.5	BR	784.90	787.03	18.79	768.24
MW-29R Zone 3	154.5-169.6	BR	784.90	787.03	28.04	758.99
MW-29R Zone 4	177.6-202.2	BR	784.90	787.03	31.97	755.06
MW-30	103-113	TOR	819.50	819.14	25.34	793.80
MW-31	80-90	TOR	818.20	817.96	26.45	791.51
MW-32	25-35	O	819.68	819.40	20.91	798.49
MW-35	152-162	BR	740.90	743.73	13.43	730.30
MW-36 Zone 1	99.1-116	BR	783.00	785.63	17.79	767.84
MW-36 Zone 2	139.5-150.7	BR	783.00	785.63	17.80	767.83
MW-36 Zone 3	180.2-192.7	BR	783.00	785.63	22.21	763.42
MW-36 Zone 4	225.6-239.2	BR	783.00	785.63	23.50	762.13
MW-36 Zone 5	269.9-275	BR	783.00	785.63	30.68	754.95
MW-37 Zone 1	185-195	BR	780.20	782.92	34.54	748.38
MW-37 Zone 2	222-232	BR	780.20	782.84	28.96	753.88
MW-37 Zone 3	257-272	BR	780.20	782.79	33.42	749.37
MW-38 Zone 1	415-430	BR	768.10	771.23	8.73	762.50
MW-38 Zone 2 ^{a,b}	479.6-499.6	BR	768.10	771.18	-0.01	771.19
MW-39 Zone 1	95-105	BR	804.10	806.20	23.12	783.08
MW-39 Zone 2	195-215	BR	804.10	806.20	38.31	767.89
MW-39 Zone 3	280-300	BR	804.10	806.20	50.47	755.73
MW-41 Zone 1	17-32	BR	733.40	736.56	7.25	729.31
MW-41 Zone 2	109-129	BR	733.40	736.79	5.90	730.89
MW-41 Zone 3	279-299	BR	733.40	736.77	8.94	727.83
MW-42 Zone 1	114-129	BR	785.50	785.44	43.21	742.23
MW-42 Zone 2	202-222	BR	785.50	785.42	40.39	745.03
MW-42 Zone 3	265-285	BR	785.50	785.40	40.65	744.75
MW-43 Zone 1	91.8 - 111.8	BR	716.15	719.19	8.00	711.19
MW-43 Zone 2	149.57 - 179.57	BR	716.15	719.20	5.52	713.68
MW-43 Zone 3	261.8 - 281.8	BR	716.15	719.17	23.11	696.06
EW-1	52 - 445	BR	775.30	778.04	350.20	427.84
EW-2	9.5 - 295	BR	768.20	769.96	NG ¹	NG ¹
P1	24.5-39.5	BR	813.10	815.42	23.43	791.99
P2	53-115	BR	783.93	785.65	13.57	772.08
Alloy	56-61	BR	789.56	791.69	17.03	774.66
TW-40	84-94	BR	785.81	788.63	22.11	766.52
TW-41	50.3-55.3	BR	775.50	778.84	18.65	760.19
TW-42	21-26	TOR	775.86	778.09	17.87	760.22
TW-43	8.6-18.6	O	775.82	778.15	17.75	760.40
TW-44	64-74	BR	782.68	785.52	14.31	771.21
TW-45	18.8-28.8	O	816.70	816.76	NG	NG
TW-46	83.3-88.3	TOR	816.72	816.58	26.43	790.15

bgs - below ground surface
BR - bedrock
O - overburden
TOR - top of rock
TOC - top of casing
NAVD88 - North American Vertical Datum of 1988
ft bgs - feet below ground surface

^a-MW-41 Zone 2, MW-38 Zone 2 TOC elevation has been adjusted by adding artesian flow fixtures to be surveyed TOC elevations. Values in this table have been adjusted accordingly

Table 2. Annual Sampling Groundwater Elevation Data - November 12, 2012						
Owens Corning - Anderson, SC						
Monitoring Well	Screen Interval (ft bgs)	Screened Interval Location	Surface Elevation (ft NAVD88)	TOC Elevation (ft NAVD88)	Static Depth to Water (ft Below TOC) 11/12/2012	Static Water Elevation, (ft NAVD88) 11/12/2012

^b-Static depth to water readings at artesian well (MW-38 Zone 2) were measured by attaching pressure gauge to top of ball valve, these values are indicated by the "-" before the measured value

^c-EW-2 was not gauged due to a system readout error.

Table 5. Annual Sampling Groundwater Analytical Results - November 2012
Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	ALLOY	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	DUP-111312 ¹	MW-18	MW-19	MW-20	MW-21
Sample Date		11/12/12	11/12/12	11/13/12	11/13/12	11/13/12	11/13/12	11/13/12	11/13/12	11/16/12	11/13/12	11/13/12	11/15/12	11/15/12	11/15/12	11/13/12	11/15/12	11/13/12	11/13/12	11/13/12	11/12/12	11/15/12	11/15/12
Screened Interval (ft)		56-61	55-65	56.7-66.7	13-28	14.7-29.7	12.0-27.0	123.6-133.6	15.9-30.9	94-104	61.4-71.4	6.0-16.0	23-33	67-72	69.2-74.2	69.5-99.5	49-59	24.1-39.1	24.1-39.1	10.6-25.6	154-169	57-67	6.5-16.5
Volatile Organic Compounds																							
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	16	42,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	48,000	<5.0	<5.0	<5.0	380	290	<5.0	190	<5.0	<5.0	<5.0	<5.0	<5.0	270	290
1,2-Dichloroethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	5.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7.4	14
Benzene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	13	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	84
Chloroform ³	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	13	13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.6	31
cis-1,2-Dichloroethene	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2,800	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.5	6.5	<5.0	<5.0	<5.0
Vinyl chloride	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1,000	<2.0	<2.0	8.7	4.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters																							
pH (s.u.)	-	5.98	5.50	6.05	4.82	6.60	4.49	7.06	4.50	6.35	5.39	6.31	5.67	5.52	6.34	6.89	7.21	5.03	NA	5.08	7.02	5.23	5.48
Temperature (degrees C)	-	19.52	18.63	19.86	18.88	19.75	19.47	19.19	22.10	20.96	19.81	19.68	17.72	17.92	18.57	16.86	17.53	19.41	NA	21.65	17.53	20.81	17.43
Specific Conductance (uS/cm)	-	0.095	0.034	0.065	0.050	0.860	0.059	0.113	1.500	0.089	0.029	0.570	0.148	0.118	0.660	0.196	0.307	0.111	NA	0.083	0.203	0.123	0.062
Eh (mV)	-	182.0	254.0	280.0	343.0	8.0	581.0	127.0	285.0	331.0	352.0	-65.0	182.0	271.0	295.0	80.0	-48.0	343.0	NA	277.0	-21.0	308.0	313.0
Dissolved Oxygen (mg/L)	-	2.65	5.35	6.95	1.82	5.51	0.00	0.90	0.00	6.05	5.68	0.00	0.00	2.76	4.33	0.00	0.00	3.82	NA	2.93	0.00	4.27	8.59
Turbidity (NTU)	-	5.05	9.46	12.05	5.67	234.00	0.60	0.00	0.58	1.23	25.40	1.96	4.87	0.00	5.64	0.17	2.59	2.19	NA	29.90	0.00	0.79	9.14

ft - feet
MCL - Maximum Contaminant Level
ug/L - micrograms per liter
mg/L - milligrams per liter
uS/cm - microsiemens per centimeter
mV - millivolts
NTU - nephelometric turbidity units
NA - not applicable
s.u. - standard units

¹ DUP-111312 collected from MW-17

² DUP-111412 collected from TW-43

³ MCL listed for Chloroform is for Total Trihalomethanes

Bold VOC results indicate concentration above the MCL

Table 5 - Annual Sampling Groundwater Analytical Results - November 2012
Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	MW-22	MW-24	MW-25	MW-26	MW-27	MW-28	MW-29R Zone 3	MW-29R Zone 4	MW-30	MW-31	MW-32	MW-35	MW-36 Zone 1	MW-36 Zone 3	MW-36 Zone 5	MW-37 Zone 1	MW-37 Zone 2	MW-37 Zone 3	MW-38 Zone 1	MW-38 Zone 2
Sample Date		11/15/12	11/14/12	11/14/12	11/14/12	11/15/12	11/16/12	11/15/12	11/15/12	11/16/12	11/16/12	11/14/12	11/12/12	11/15/12	11/16/12	11/16/12	11/14/12	11/15/12	11/12/12	11/14/12	11/14/12
Screened Interval (ft)		78-116	62-72	40-50	56.7-66.7	69-99	21-31	154.5-169.6	177.6-202.2	103-113	80-90	25-35	152-162	99.1-116	180.2-192.7	269.9-275	185-195	222-232	257-272	415-430	479.6-499.6
Volatile Organic Compounds																					
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	140,000	<5.0	<5.0	<5.0	<5.0	16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	14	6.7	9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	320	190	<5.0	<5.0	67	140,000	290	290	4,000	1,800	29	170	<5.0	<5.0	<5.0	91	140	<5.0	<5.0	<5.0
1,2-Dichloroethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	21	9.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	19	15	<5.0	<5.0	7.1	<5,000	16	16	150	21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform ³	80	11	15	<5.0	<5.0	7.9	<5,000	10	11	5.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.8	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters																					
pH (s.u.)	-	5.56	5.67	5.19	6.34	7.02	4.27	5.54	5.50	6.20	6.11	6.56	7.54	6.06	7.34	7.26	7.58	10.84	7.05	7.41	7.92
Temperature (degrees C)	-	16.69	19.69	17.78	18.97	20.60	21.88	17.58	17.66	19.83	19.61	22.05	17.52	17.76	17.12	18.63	15.63	10.85	17.01	16.46	16.97
Specific Conductance (uS/cm)	-	0.140	0.137	0.055	0.066	0.121	2.960	0.153	0.147	0.097	0.073	0.535	0.631	0.110	1.389	4.554	0.894	0.255	0.421	0.317	0.178
Eh (mV)	-	287.0	212.0	178.0	175.0	54.0	269.0	-36.7	-0.4	145.0	218.0	-139.0	-131.0	-50.8	-103.4	-179.8	-223.0	-168.3	-46.0	-233.0	-204.0
Dissolved Oxygen (mg/L)	-	1.84	0.68	4.94	3.53	0.00	2.96	1.70	1.07	2.69	1.17	0.00	0.00	2.45	5.05	6.21	0.31	6.45	4.61	1.76	0.11
Turbidity (NTU)	-	0.05	1.84	2.74	92.00	1.41	9.58	0.00	0.00	7.87	7.07	7.29	0.45	0.00	1.21	11.30	1.78	1.33	0.00	0.96	0.00

ft - feet
MCL - Maximum Contaminant Level
ug/L - micrograms per liter
mg/L - milligrams per liter
uS/cm - microsiemens per centimeter
mV - millivolts
NTU - nephelometric turbidity units
NA - not applicable
s.u. - standard units

¹ DUP-111312 collected from MW-17
² DUP-111412 collected from TW-43
³ MCL listed for Chloroform is for Total Trihalometh.
Bold VOC results indicate concentration above the

Table 5. Annual Sampling Groundwater Analytical Results - November 2012

Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	MW-39 Zone 1	MW-39 Zone 2	MW-39 Zone 3	MW-41 Zone 1	MW-41 Zone 2	MW-41 Zone 3	MW-42 Zone 1	MW-42 Zone 2	MW-42 Zone 3	MW-43 Zone 1	MW-43 Zone 2	MW-43 Zone 3	TW-40	TW-41	TW-42	TW-43	DUP- 111412 ²	TW-44	TW-46
Sample Date		11/13/12	11/13/12	11/13/12	11/15/12	11/15/12	11/15/12	11/14/12	11/14/12	11/14/12	11/14/12	11/13/12	11/13/12	11/13/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12	11/14/12
Screened Interval (ft)		95-105	195-215	280-300	17-32	109-129	279-299	114-129	202-222	265-285	92.5 - 112.5	150 - 180	262.5 - 282.5	84-94	50.3-55.3	21-26	8.6-18.6	8.6-18.6	64-74	83.3-88.3
Volatile Organic Compounds																				
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	<5.0	<5.0	<5.0	190	78	78	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	28
1,2-Dichloroethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.3
Chloroform ³	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11
cis-1,2-Dichloroethene	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters																				
pH (s.u.)	-	6.80	7.70	6.89	7.68	7.88	7.65	9.78	7.34	7.24	6.59	7.23	7.69	12.79	7.85	5.12	5.06	NA	6.50	11.72
Temperature (degrees C)	-	18.22	17.93	18.53	16.18	12.61	15.03	17.42	16.32	18.76	14.98	16.31	17.40	16.12	18.55	15.12	18.05	NA	16.82	20.40
Specific Conductance (uS/cm)	-	0.084	0.588	0.159	0.228	0.259	0.362	0.152	0.667	0.251	0.960	0.227	0.318	4.600	0.446	0.041	0.044	NA	0.073	0.853
Eh (mV)	-	79.6	-76.1	-103.1	-25.6	-99.0	-179.0	-113.0	-271.0	-253.0	-78.8	-229.0	-178.9	-74.0	141.0	86.4	129.6	NA	287.0	-68.0
Dissolved Oxygen (mg/L)	-	2.39	9.93	9.75	0.59	8.51	1.26	0.38	0.31	0.35	2.05	1.13	0.25	3.96	2.92	5.98	6.51	NA	7.09	0.0
Turbidity (NTU)	-	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	1.14	31.79	1.01	1.97	3.86	7.00	4.35	21.00	NA	9.46	11.8

ft - feet

MCL - Maximum Contaminant Level

ug/L - micrograms per liter

mg/L - milligrams per liter

uS/cm - microsiemens per centimeter

mV - millivolts

NTU - nephelometric turbidity units

NA - not applicable

s.u. - standard units

¹ DUP-111312 collected from MW-17

² DUP-111412 collected from TW-43

³ MCL listed for Chloroform is for Total Trihalometh.

Bold VOC results indicate concentration above the

Table 6. Annual Surface Water Analytical Results - November 2012
Owens Corning - Anderson, SC

Sample ID	Surface Water Screening Values ¹		SCDHEC Surface Water Standards ²		SW-1	DUP-111512 ³	SW-3	SW-3A	SW-3B	SW-6	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15
	Acute (ug/L)	Chronic (ug/L)	For Consumption of Water and Organism	For Consumption of Organism Only	11/15/12	11/15/12	11/15/12	11/15/12	NA	11/15/12	11/15/12	11/15/12	11/15/12	11/15/12	11/15/12	11/15/12
Volatile Organic Compounds																
1,1,1-Trichloroethane	-	-	-	-	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	-	-	-	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	3030	303	330	7,100	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	11800	2000	0.38	37	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	-	-	2.2	51	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	3520	352	0.23	1.6	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	2890	289	5.7	470	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	-	-	-	-	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	-	-	530	2,100	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	-	-	4.6	590	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	528	84	0.69	3.3	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	-	-	1,300	15,000	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	-	-	-	-	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	-	-	2.5	30	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	-	-	0.025	2.4	<2.0	<2.0	<2.0	<2.0	Dry	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	-	-	-	-	<5.0	<5.0	<5.0	<5.0	Dry	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters																
pH (s.u.)	-	-	-	-	7.48	7.48	8.12	8.18	Dry	7.49	7.40	7.65	7.70	7.75	7.56	7.49
Temperature (degrees C)	-	-	-	-	10.41	10.41	11.80	12.49	Dry	10.48	10.37	10.86	10.51	10.34	10.34	10.50
Specific Conductance (uS/cm)	-	-	-	-	0.252	0.252	0.331	0.543	Dry	0.232	0.222	0.360	0.419	0.233	0.294	0.223
Eh (mV)	-	-	-	-	67.8	67.8	52.8	42.6	Dry	64.1	73.3	69.6	68.8	67.8	68.4	73.3
Dissolved Oxygen (mg/L)	-	-	-	-	9.23	9.23	9.09	8.48	Dry	9.51	9.64	8.84	8.90	9.16	8.77	9.41
Turbidity (NTU)	-	-	-	-	11.61	11.61	38.3	41.1	Dry	18.6	13.1	9.05	11.8	9.75	12.6	10.21

ug/L - micrograms per liter

mg/L - milligrams per liter

uS/cm - microsiemens per centimeter

mV - millivolts

NTU - nephelometric turbidity units

NA - Not Analyzed; not enough water in creek to sample

Dry - Not enough water in in creek to sample

SCDHEC - South Carolina Department of Health and Environmental Control

s.u. - standard units

SW - Surface Water

¹ Region IV Ecological Risk Assessment Bulletins - Supplement to RAGS

² SCDHEC Water Quality Classifications and Standards (R.61-68), Human Health, as published in USEPA National Recommended Water Quality Criteria

³ DUP-111512 collected from SW-1

BOLD - VOC results indicates a concentration above USEPA and/or SCDHEC Surface Water Standard

Table 7. Residential Well Analytical Results - November 2012

Owens Corning - Anderson, SC

Sample ID	MCL (ug/L)	628 Airline Rd	408 Clinkscales Rd	605 Clinkscales Rd	721 Clinkscales Rd	1303 Clinkscales Rd	119 Cloverhill Dr	DUP-111212 ¹	115 Elrod Rd	335 Elrod Rd	117 Faye Dr	200 Friendship Ln	200 Kaye Dr	303 Kaye Dr	311 Kaye Dr	412 Kaye Dr
Sample Date		11/12/12	11/12/12	11/12/12	11/12/12	11/12/12	11/12/12	11/12/12	NS	NS	11/12/12	11/12/12	11/12/12	11/12/12	11/12/12	11/12/12
Volatile Organic Compounds																
1,1,1-Trichloroethane	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform ²	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	700	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylenes, total	10,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Field Parameters																
pH (s.u.)	-	6.01	5.07	4.66	5.08	5.50	5.07	5.07	NS	NS	6.85	5.71	6.17	5.97	7.19	5.98
Temperature (degrees C)	-	17.19	17.62	17.62	17.83	16.82	16.56	16.56	NS	NS	17.64	16.77	17.16	17.77	17.04	18.09
Specific Conductance (uS/cm)	-	0.063	0.054	0.019	0.062	0.042	0.047	0.047	NS	NS	0.232	0.177	0.960	0.136	0.184	0.063
Eh (mV)	-	159.4	134.6	219.0	213.9	132.3	190.0	190.0	NS	NS	156.5	187.1	163.5	159.7	139.4	190.0
Dissolved Oxygen (mg/L)	-	4.45	7.30	6.81	6.72	7.23	6.28	6.28	NS	NS	5.62	3.36	5.60	5.73	5.75	6.41
Turbidity (NTU)	-	0.41	2.17	1.80	0.40	0.31	0.11	0.11	NS	NS	0.15	0.48	0.10	0.02	3.06	0.39

MCL - Maximum Contaminant Level
 ug/L - micrograms per liter
 mg/L - milligrams per liter
 uS/cm - microsiemens per centimeter
 mV - millivolts
 NTU - nephelometric turbidity units
 NS - Not sampled; pump is disconnected
 NA - not applicable
 s.u. - standard units

¹ Duplicate sample Dup-111212 was collected from 119 Cloverhill Drive

² MCL listed for Chloroform is for Total Trihalomethanes

**Table 8. Residential Well Location Map ID
Owens Corning - Anderson, SC**

Map ID*	Location	Map ID*	Location
1	3715 Mabry Street	38	215 Elrod Road
2	634 Airline Road	39	115 Elrod Road
3	3735 Keys Street	40	119 Cloverhill Drive
4	1100 Airline Road	41	122 Kayle Drive
5	3721 Keys Street	42	138 Kayle Drive
6	4004 Keys Street	43	1802 Airline Road
7	605 Clinkscales Road	44	1303 Clinkscales Road
8	134 Friendship Lane	45	815 Airline Road
9	138 Friendship Lane	46	300 Jones Road
10	200 Friendship Lane	47	5104 Johnson Street
11	721 Clinkscales Road	48	104 Herbs Lane
12	711 Clinkscales Road	49	203 Travis Road
13	628 Airline Road	50	107 Jones Road
14	3731 Keys Street	51	303 Flat Rock Road
15	3713 Keys Street	52	4518 Keys Street
16	624 True Temper Road	53	4608 Keys Street
17	1501 Airline Road	54	4610 Keys Street
18	420 True Temper Road	55	5005 Johnson Street
19	408 Clinkscales Road	56	5009 Johnson Street
20	401 Clinkscales Road	57	5010 Johnson Street
21	4515 Keys Street	58	5014 Johnson Street
22	305 Harry Drive	59	5101 Johnson Street
23	150 Clinkscales Road	60	4906 Highway 81 South
24	943 Flat Rock Road	61	5305 Highway 81 South
25	325 Clinkscales Road	62	116 Young Road
26	322 Clinkscales Road	63	201 True Temper Road
27	321 Clinkscales Road	64	106 Pickens Circle
28	137 Knowlandwood Circle	65	110 Pickens Circle
29	412 Kaye Drive	66	123 Pickens Circle
30	413 Kaye Drive	67	127 Pickens Circle
31	311 Kaye Drive	68	131 Pickens Circle
32	117 Faye Drive	69	136 Pickens Circle
33	303 Kaye Drive	70	206 Wesley Court
34	End of Kaye Drive	71	104 Harry Drive
35	217 Kaye Drive	72	299 True Temper Road
36	200 Kaye Drive	73	119 True Temper Road
37	335 Elrod Road		

* Map ID corresponds to Figure 13 - Residential Well Sampling Location Map - November 2012

Appendix A: Groundwater Sampling Field Data Sheets

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-19

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200, 201 Area of Concern: _____
 Client: OC Personnel: BS
 Project Location: Anderson, SC Weather: 95°F Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 99 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 26.15 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-15-10 Time: 1425 Equipment Model(s):

Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. GeoSub
2. GeoSub controller
3. VSI
4. Lalotte

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1425</u>	<u>0.5</u>	<u>5.30</u>	<u>17.88</u>	<u>0.327</u>	<u>135.3</u>	<u>3.69</u>	<u>47.4</u>	<u>26.91</u>	<u>Pump at bottom of well</u>
<u>1435</u>	<u>1.0</u>	<u>5.85</u>	<u>18.10</u>	<u>0.259</u>	<u>57.5</u>	<u>3.83</u>	<u>11.8</u>	<u>26.91</u>	<u>at suggestion of BS</u>
<u>1445</u>	<u>1.5</u>	<u>6.35</u>	<u>18.30</u>	<u>0.225</u>	<u>35.0</u>	<u>4.05</u>	<u>5.63</u>	<u>26.91</u>	<u>Pumping at 42</u>
<u>1455</u>	<u>2.0</u>	<u>6.20</u>	<u>18.25</u>	<u>0.197</u>	<u>41.4</u>	<u>3.70</u>	<u>3.0</u>	<u>26.91</u>	
<u>1505</u>	<u>2.5</u>	<u>6.26</u>	<u>18.43</u>	<u>0.192</u>	<u>36.3</u>	<u>3.25</u>	<u>2.44</u>	<u>26.91</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-19 Sample Date: 8-15-10 Sample Time: 1610 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Signature]



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

5. FLURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1515	3.5	6.29	18.30	0.189	33.7	3.83	2.81	26.91	Beam checking
1525	5.0	6.42	18.38	0.189	26.3	4.06	10.82	26.91	water level, still good
1535	6.5	6.39	18.42	0.187	26.8	4.89	2.24	26.91	
1545	8.0	6.42	18.47	0.186	24.1	4.34	1.79	26.91	
1555	10.0	6.45	18.40	0.184	23.6	4.39	1.52	26.91	
1605	12.0	6.47	18.44	0.184	19.6	4.39	1.43	26.91	
Sample due to pH, Spec Cond, ORP, and DO									

urge data continued on next sheet?

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: ~~MW-89 Zone 2~~^{GS} MW-22

1. PROJECT INFORMATION

Project Number: 142576 Task Number: 200.001 Area of Concern: _____
 Client: OWBAS - Corning Personnel: GS
 Project Location: Anderson, SC Weather: ~85 Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 215 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 31.04 feet ^{12.39} From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-17-12 Time: 1030 Equipment Model(s): _____
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons Calibrated? Yes No
 Was well purged dry? Yes No Pumping Rate: _____ gal/min

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1030	0	4.78	18.10	0.129	58.7	8.17	0.25	12.39	
1040	5	5.25	18.13	0.129	38.0	8.83	0.27	12.39	
1050	8	5.34	18.15	0.129	32.4	9.41	0.34	12.39	
1100	12	5.33	18.14	0.129	32.1	9.64	0.66	12.39	
1110	15	5.28	18.10	0.126	34.4	8.51	0.33	12.39	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-22 Sample Date: 8-17-12 Sample Time: 1145 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

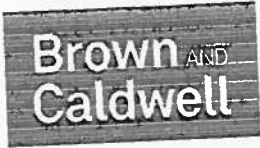
Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET



WELL ID: _____

3. PURGE DATA (continued from page _____)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1120	17	5.30	18.16	0.129	36.2	9.77	0.69	12.40	
1130	19	5.29	18.16	0.129	36.8	9.33	0.47	12.40	
1140	22	5.29	18.17	0.129	41.0	9.31	0.35		
Sample at 1148, 1145									

Purge data continued on next sheet?

Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-3S

1. PROJECT INFORMATION

Project Number: 142376 Task Number: _____ Area of Concern: _____
 Client: _____ Personnel: GS
 Project Location: _____ Weather: 70 cloudy

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 12.71 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.459 gal/ft

3. PURGE DATA

Date Purged: 8-15 Time: 1745 Equipment Model(s): _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons Calibrated? Yes No
 Was well purged dry? Yes No Pumping Rate: _____ gal/min

Time	Cum. Gallons Removed (gal)	pH ±0.1 SU	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1745	0.00	5.84	16.38	0.279	88.3	4.73	0.88	13.71	
1755	2.00	6.70	16.56	0.276	-190.00	5.69	0.79	13.71	-20 ORP
1805	4.00	7.05	16.59	0.264	-49.8	8.64	0.83	13.71	slowed speed
1815	6.00	7.31	16.91	0.265	-51.8	7.42	0.53	13.71	
1825	8.00	7.32	16.91	0.265	-52.9	7.03	0.52	13.71	Slowed speed

Purge data continued on next sheet?

4. SAMPLING DATA

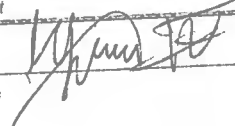
Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-3S Sample Date: 8-15 Sample Time: 1910 # of Containers: 0
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: BB-081512 # of Containers: 2

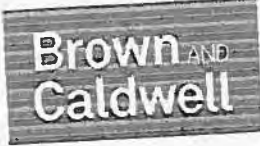
Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet

Signature: 



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

3. PURGE DATA (continued from page _____)									
Time	Cum. Gallons Removed (gal)	PH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1835	10.0	7.34	16.89	0.266	-52.8	6.86	0.49	13.71	
1845	12.0	7.39	16.97	0.266	-56.6	6.63	0.51	13.71	
1855	14.0	7.38	16.84	0.266	-57.7	6.70	0.53	13.71	
				Sample at 1910					

Purge data continued on next sheet?

Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 108670¹⁴²³⁷⁶ Task Number: 200-001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: Sunny ~70°F

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches Length of water column calculation:
 Screen Diameter: 6 inches (9094-Current Dg reading)*0.02775)*2.3108) = Length of water column (ft)
 Sampling Interval: 154.5-169.6 feet Well Vol. calculation:
 Depth to Static Water: 5973.1 Dg 1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
 Depth to Product: _____ feet = [22.18 gal - 2.52 gal] + (0.0102 gal/ft x length of water column)
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-17-12 Time: 0740 Equipment Model(s):
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. LaMotte
3. MFC
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0740	0.3	5.30	18.17	0.214	83.1	15.71	0.74	6964.2	
0750	0.6	4.11	17.63	0.150	111.5	13.33	0.69	6975.8	No off scale again
0800	0.9	4.79	17.75	0.149	72.7	11.64	0.30	6966.3	
0810	1.2	5.03	17.82	0.148	54.8	9.26	0.30	6964.2	
0820	1.4	5.14	17.98	0.147	48.9	8.43	0.26	6966.3	

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-29R Zone 3 Sample Date: 08-17-12 Sample Time: 0915 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

Purge data continued on next sheet?

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 3-Waterloo

3. PURGE DATA (continued from page _____)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0830		5.18	18.06	0.147	47.9	7.66	0.27	6966.1	
0840		5.24	18.17	0.147	45.6	7.16	0.31	6966.3	
0850		5.28	18.17	0.147	44.2	7.34	0.33	6967.1	
0900		5.32	18.17	0.147	42.2	7.44	0.29	6966.1	
0910		5.30	18.26	0.147	42.7	7.90	0.39	6973.2	
			0915	sample					

Purge data continued on next sheet?

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

1. PROJECT INFORMATION

Project Number: 138670 ¹⁴³³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: 70 sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches Length of water column calculation:
 Screen Diameter: 6 inches (8932.8-Current Dg reading)*0.02724*2.3108 = Length of water column (ft)
 Sampling Interval: 177.6-202.2 feet Well Vol. calculation:
 Depth to Static Water: 630.8 feet 1 well vol. = [vol sand interval(6") - vol of waterloo casing (2") + vol of water intubing(1/4")
 = [36.14 gal - 4.11 gal] + (0.0102 gal/ft x length of water column)
 Depth to Product: _____ feet
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-16-12 Time: 1645 Equipment Model(s)
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1645	0.3	5.40	21.40	0.162	90.3	2.74	1.31	6386	Stable, 4CPM
1655	0.6	4.74	20.36	0.151	95.7	2.58	1.27	6386.3	DO still fluctuating
1705	1.00	4.40	19.29	0.143	97.8	2.78	1.17	6386.1	did calibration w/
1715	1.5	4.72	19.30	0.143	76.3	3.00	1.14	6386.1	BS, still jumping,
1725	2.0	5.08	19.31	0.144	59.4	3.18	1.09	6386.1	recording smallest value

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 6386 Field Filtered? Yes No
 Sample ID: MW-29R Zone 4 Sample Date: 8-16-12 Sample Time: 1810 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-29R Zone 4-Waterloo

3. PURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1735		5.26	19.33	0.143	46.9	3.56	0.66	6386	
1745		5.43	19.40	0.143	36.8	4.08	0.43	6386	
1755		5.47	19.40	0.143	31.9	4.15	0.41	6386.1	
1805		5.46	19.41	0.143	32.2	4.47	0.39	6386.1	
		Sampled due to PH, Spec Cond, and ORP							
		1810							

Signature: *[Handwritten Signature]*

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 1-Waterloo

1. PROJECT INFORMATION

Project Number: 198670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: ~90° Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches
 Screen Diameter: 6 inches
 Sampling Interval: 99.1-116 feet
 Depth to Static Water: 6361 Dg
 Depth to Product: _____ feet
 Length of Water Column: _____ feet
 Well Volume: _____ gal
 Screened Interval (from GS): _____
 Length of water column calculation:
 (8558.7-Current Dg reading)*0.01797*2.3108 = Length of water column (ft)
 Well Vol. calculation:
 1 well vol. = [vol sand interval(6") - vol of waterloo casing (2") + vol of tubing(1/4")
 = [24.83 gal - 2.82 gal] + (0.0102 gal/ft x length of water column)
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-16-12 Time: 1400
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____ Equipment Model(s)
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min
 Calibrated? Yes No

1. YSI
2. LaMotte
3. MP-50
4. ASR COMPRESSOR

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1400	0.5	6.26	18.88	0.109	42.7	6.53	2.05	6367	2 CPM
1410	1.2	4.46	18.27	0.107	30.5	7.89	1.97	6379	
1420	1.5	5.14	18.14	0.106	93.1	10.55	1.01	6378	called J. Meadors
1430	2.2	6.30	18.15	0.103	41.1	-	1.02	6378	had DO meter
1440	2.5	5.45	18.12	0.104	88.7	-	0.99	6369	

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 6378 Field Filtered? Yes No
 Sample ID: MW-36 Zone 1 Sample Date: 08-16-12 Sample Time: 1600 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 1-Waterloo

3. PURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments	
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU			
1450	1.1	5.99	18.08	0.104	47.1	—	1.11	6379.7		
1500	1.2	6.04	18.20	0.104	47.0	—	0.63	6378.5		
1510	1.3	6.12	18.23	0.104	42.6	—	0.71	6386.1		
1520	1.4	6.15	19.16	0.104	41.4	—	0.53	6361.5		
1530	2.0	6.18	18.23	0.104	38.1	—	0.67	6372.7		
1540	2.5	6.20	18.28	0.104	38.3	—	0.74	6370.1		
1550		6.16	19.28	0.104	40.1					
1600										
			1600 sample due to stability							

Purge data continued on next sheet?

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 138070 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: Sunny -70

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches Length of water column calculation:
 Screen Diameter: 6 inches (9093.1-Current Dg reading)*0.02725)*2.3108) = Length of water column (ft)
 Sampling Interval: 180.2-192.7 feet Well Vol. calculation:
 Depth to Static Water: 653.1 feet 1 well vol. = [vol sand interval(6") - vol of Waterloo casing (2") + vol of water in tubing(1/4")
 = [18.36 gal - 2.09 gal] + (0.0102 x length of water column)
 Depth to Product: _____ feet
 Length of Water Column: 161 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/16/12 Time: 0820 Equipment Model(s)
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Waterlog
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. Lamotte
3. MPSO
4. Air Compressor

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>0830</u>	<u>.1</u>	<u>6.90</u>	<u>20.13</u>	<u>1.505</u>	<u>-40.2</u>	<u>8.64</u>	<u>2.22</u>	<u>7968.1</u>	<u>Known to Purge</u>
<u>830</u>	<u>.2</u>	<u>6.85</u>	<u>20.10</u>	<u>1.491</u>	<u>-39.0</u>	<u>4.63</u>	<u>2.44</u>	<u>7740</u>	<u>continuing at CPM=2</u>
<u>0940</u>	<u>.3</u>	<u>6.98</u>	<u>20.41</u>	<u>1.488</u>	<u>-40.8</u>	<u>4.16</u>	<u>2.47</u>	<u>7710</u>	<u>slow purge, CPM=3</u>
<u>0850</u>	<u>.4</u>	<u>7.02</u>	<u>20.45</u>	<u>1.488</u>	<u>-24.4</u>	<u>5.01</u>	<u>2.35</u>	<u>7635</u>	<u>small leak in YSI</u>
<u>0900</u>	<u>.5</u>	<u>7.02</u>	<u>20.45</u>	<u>1.483</u>	<u>-42.2</u>	<u>3.26</u>	<u>1.78</u>	<u>7635</u>	<u>started to drop 150 seconds</u>

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 688.1 Field Filtered? Yes No
 Sample ID: MW-36 Zone 3 Sample Date: 8/16/12 Sample Time: 1310 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L
VOC

5. COMMENTS

Dry

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: M. Kala

GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-36 Zone 3-Waterloo

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0910	.55	7.04	20.93	1.487	-37.3	3.31		7846.1	water falls, no purge
									Loss of pressure caused water to fall. couldn't get down well fixed, hose connection problem turbidity, no
0930	.60	7.05	21.03	1.485	-33.1	6.43		8031.1	flow
0940	.65	7.06	21.25	1.486	-28.4	4.67		8731 8326.1	
									Purge water falling, hooked up air compressor to assist PSI
0955	.70	6.98	20.89	1.487	-35.2	4.14	1.55	8968	
1005	.75	7.04	20.95	1.489	-33.6	4.67	1.41	8986	Loose hose, slight leak
1015	1	7.58	18.36	0.018	-54.6	10.53		9093	1/PM = 30/30
									DRY!!! at 1015
									sample later
									8/17/12 1310 sample

Purge data continued on next sheet?

[Handwritten Signature]

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 5-Waterloo

1. PROJECT INFORMATION

Project Number: 198670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: 65
 Project Location: Anderson, South Carolina Weather: ~80 Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches Length of water column calculation:
 Screen Diameter: 6 inches $(8843.2 - \text{Current Dg reading}) * 0.03897 * 2.3108 = \text{length of water column (ft)}$
 Sampling Interval: 269.9-275 feet Well Vol. calculation:
 Depth to Static Water: 6286 feet 1 well vol. = [vol sand interval(6") - vol of waterloo casing (2")] + vol of water in tubing(1/4")
 Depth to Product: _____ feet = [7.49 gal - 0.85 gal] + (0.0102 x length of water column)
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-16-12 Time: 1030 Equipment Model(s):
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. Air Compressor
2. MP-50
3. Lottette
4. YSI

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1030	.1	7.34	20.36	5.704	61.3	7.68	2.34	7972	7981, wrong wiring
1040	.2	7.16	19.76	5.095	-69.7	6.12	3.14	7826	7843.1
1050	.3	7.29	20.69	4.967	-75.5	3.68	6.17	7463	1 cpm
1100	.35	7.32	21.12	4.952	-63.6	3.39	10.92	7846	
1110	.4	7.37	21.98	4.972	-63.8	4.91	14.9	7801	low flow out of discharge

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Water
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 7949.2 Field Filtered? Yes No
 Sample ID: MW-36 Zone 5 Sample Date: 8-16-12 Sample Time: 1235 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

Purge data continued on next sheet?

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

M. K. J.

GROUNDWATER SAMPLING FIELD DATA SHEETWELL ID: MW-36 Zone 5-Waterloo**3. PURGE DATA** (continued from page 2)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1120	.45	7.40	22.38	5.032	-93.6	5.55	14.9	7803.1	slow discharge
1130	.5	7.41	23.03	5.063	-111.6	7.94	14.5	7961.8	
1140	.55	7.41	23.58	5.075	-122.1	6.86	34.3	7827.3	
1150	.60	7.23	24.34	5.128	-177.6	7.22	33.2	7993.2	very slow discharge
1200	.65	7.22	24.78	5.223	-203.4	9.55	13.3	7914.1	
1210	.70	7.10	25.29	5.224	-228.4	10.74	13.0	7927.3	
1220	.75	7.12	25.73	5.241	-260.8	13.35	15.4	7933.2	
1230	.80	7.02	26.11	5.258	-270.7	13.03		7949.2	
		Sample at			1235				

Purge data continued on next sheet?


Signature

WELL ID: MW-37, ZONE 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. WHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/15/12 Time: 1543 Equipment Model(s):
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LAMOTTE 2020 WE

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1550		7.48	24.24	1.902	-129.3	25.6	1.15	37.5	
1600		7.43	22.45	1.894	-87.3	37.9	1.83	39.6	
1610		7.42	22.48	1.896	-64.8	39.9	4.96	42.3	SLOWED PUMP
1620		7.42	24.56	1.907	-29.5	34.2	6.11	42.2	
1630		7.42	26.56	1.903	-23.4	35.1	6.56	42.2	

4. SAMPLING DATA

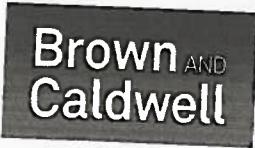
Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-37, 21 Sample Date: 8/16/12 Sample Time: 1930 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Purge data continued on next sheet?
Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

No CAP, PUMP WOULDN'T WORK SUFFICIENTLY ON 8/15, TRIED AGAIN ON 8/16, WITH PUMP AT MAX PRESSURE STILL ONLY PUSHING 3" OF TUBING PER MINUTE, PULLED PUMP AND REPLACED ALL RINGS AND GRAB PLATE, MOLDED GRAB PLATE TO FACE
 Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

[Signature]
 Signature



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37, ZONE 1

3. PURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1640		7.42	27.53	1.917	-20.4	36.8			
1655		7.47	28.56	1.401	-15.0	54.4	7.86	42.0	ADJUSTING PUMPS SPEED
1700		7.48	28.85	1.085	-15.8	55.4		42.4	RESTARTED @ 1730
1740		7.59	30.31	1.933	-7.1	49.1			
DISSEMBLED PUMP, SWITCHED GASKETS, RESTARTED 1800, FAILED AGAIN									
1830		7.78	24.22	0.994	8.9	24.50	6.18	24.0	
1840		8.12	20.55	0.988	-21.4	31.75	5.52	32.7	
1850		8.17	19.85	0.980	-44.1	30.87	6.25	35.5	
1900		8.21	19.44	0.980	-49.1	27.41	6.51	39.9	
1910		8.21	19.38	0.978	-59.0	27.91	8.03	41.4	
1920		8.21	19.29	0.978	-68.5	27.23	8.91	45.9	

STOPPED PUMP TO CHECK BLADDER

Purge data continued on next sheet?

[Signature]
Signature

WELL ID: MW-37, ZONE 2

1. PROJECT INFORMATION

Project Number: 142 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. WHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/16/12 Time: 1054 1147 Equipment Model(s):
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LA MOTTE 2020 we

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1200		9.57	26.22	0.166	-153.6	207.9	2.58	21.7	
1210		9.48	26.74	0.166	-132.4	155.3	4.68	21.8	
1220		9.42	26.97	0.166	-140.9	158.0	3.47	21.8	
1230		9.10	27.07	0.166	-124.4	184.2	3.74	21.8	
1240		8.80	26.87	0.162	-111.3	214.2	3.77	21.8	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-37-22 Sample Date: 08/16/12 Sample Time: 1345 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: DUP-081612 # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

NO CAP, INITIAL PURGE START FAILED DUE TO PUMP ISSUES, RESTARTED AT 1147,

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


 Signature

WELL ID: MW-37, Zone 2

3. PURGE DATA (continued from page 1)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1250		8.64	26.52	0.160	-113.6	226.9	3.27	21.8	
1300		8.58	26.56	0.160	-103.2	233.3	3.07	21.9	
1310		8.47	26.97	0.160	-96.6	280.2	2.81	21.8	
1320		8.46	26.95	0.160	-95.8	293.6	2.66	21.8	
1330		8.52	26.83	0.160	-91.6	187.9	3.27	21.8	
1340		8.53	26.80	0.159	-97.3	141.3	3.20	21.8	

Purge data continued on next sheet?

[Signature]
 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37, ZONE 3

1. PROJECT INFORMATION

Project Number: 142 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. KHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/16/12 Time: 0800 Equipment Model(s)
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LAMOTTE 2020 WC

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0815		7.34	19.21	0.541	-151.1	180.3	4.71	37.0	
0825		7.52	18.93	0.507	-126.2	190.2	8.52	40.4	
0835		7.46	18.83	0.501	-138.3	189.8	9.75	43.9	
0845		7.33	18.86	0.479	-156.0	182.5	8.83	47.6	
0855		7.22	19.45	0.454	-152.4	169.2	9.44	50.0	SLOWED PUMP BY ONE CYCLE PM

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-37.33 Sample Date: 08/16/12 Sample Time: 1025 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: FB-081612 # of Containers: 2

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

No Cap

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37, ZONE 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0905		7.15	19.71	0.430	-137.5	56.7	9.18	52.6	
0915		7.12	19.80	0.413	-121.5	51.1	9.22	54.8	
0925		7.11	19.87	0.409	-108.6	52.7	9.86	56.9	SLOWED PUMP BY ONE CYCLE F
0935		7.11	19.99	0.409	-85.3	57.3	9.98	57.3	
0945		7.11	20.31	0.409	-77.6	196.8	10.04	58.5	REDUCED PRESSURE
0955		7.13	20.87	0.409	-63.4	170.5	10.01	58.5	
1005		7.13	21.25	0.409	-53.4	171.0	10.07	58.7	
1015		7.13	21.65	0.410	-42.8	178.4	9.96	58.8	

Purge data continued on next sheet?



Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

1. PROJECT INFORMATION

Project Number: 198670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: K. KHETSTONE
 Project Location: Anderson, South Carolina Weather: PARTLY CLOUDY, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 430 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 2.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 427.5 feet Well Volume: 17.5 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/14/12 Time: 1732 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LAMOTTE 2020we

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1737		7.39	28.08	0.362	-196.9	69.4	1.18	5.2	
1747		7.32	22.73	0.352	-217.8	8.8	2.78	11.3	SLOWED PUMP BY ONE CYCLE PM
1757		7.33	22.50	0.351	-215.8	8.5	2.00	15.7	THROTTLED DOWN PUMP
1807		7.33	22.00	0.350	-223.6	16.5	2.21	20.7	
1817		7.33	21.60	0.351	-222.5	15.6	1.84	25.6	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-38, 21 Sample Date: 08/14/12 Sample Time: 1845 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

**BROWN AND
CALDWELL**

WELL ID: MW-38 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1827		7.34	21.49	0.351	-221.0	16.7	2.63	29.0	
1837		7.34	21.36	0.350	-218.0	16.7	3.25	33.6	

Purge data continued on next sheet?

Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 2

1. PROJECT INFORMATION

Project Number: 138670 ¹⁴²³³⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: K. KIMETSTONE
 Project Location: Anderson, South Carolina Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 499.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/17/12 Time: 0937 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Artesian
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556 MFS
2. LaMotte 2020 we
3. _____
4. _____

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0948		7.55	23.62	0.191	-145.7	1.69	1.25		
0958		7.72	20.57	0.193	-187.2	9.30	0.21		
1008		7.77	20.93	0.193	-196.7	18.42	0.37		
1018		7.82	20.78	0.192	-195.5	15.21	0.25		
1028		7.84	21.59	0.192	-197.9	9.03	0.64		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Artesian
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-38-27 Sample Date: 08/17/12 Sample Time: 1050 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

ARTESIAN

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

[Signature]
 Signature

BROWN AND CALDWELL

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1038		7.87	22.04	0.192	-199.1	15.50	1.09		
1048		7.88	22.64	0.193	-204.3	12.45	0.14		

Purge data continued on next sheet?



Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 1

1. PROJECT INFORMATION

Project Number: 138670 ¹⁴²³⁹⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: 78°F Cloudy

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 105 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 22.15 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-14-12 Time: 9:00 Equipment Model(s) _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI-calibrated
2. LaMotte
3. MP50
4. Bladder pump

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
920	0.1	5.47	22.48	0.108	69.1	2.66	6.33	22.15	
930	0.2	5.00	21.92	0.100	87.1	3.90	4.15	22.15	
940	0.25	3.83	20.06	0.091	145.9	2.19	4.71	22.15	water level holding
950	0.30	3.93	19.41	0.089	130.1	1.17	4.40	22.15	4 rpm
1000	0.40	4.39	19.24	0.087	107.7	1.37	3.29	22.15	pH = 4.45

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-39 Zone 1 Sample Date: 8-14-12 Sample Time: 1125 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

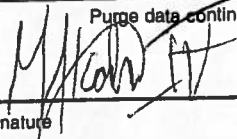
BROWN AND CALDWELL

WELL ID: MW-39 Zone 1

3. PURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1010	0.45	5.46	19.38	0.086	54.7	1.66	2.63	22.19	ph = 5.46
1020	0.56	5.89	19.57	0.085	33.4	1.70	1.54	22.19	
1030	0.60	6.30	19.77	0.086	16.7	2.22	1.35	22.19	
1040	0.65	6.38	19.89	0.086	16.4	2.51	1.09	22.19	Good flow
1050	0.70	6.61	20.40	0.086	8.0	2.80	1.01	22.19	out of tubes
1100	0.75	6.51	20.08	0.087	15.8	2.97	0.95	22.19	
1110	0.80	6.63	20.54	0.087	11.6	3.12	0.93	22.19	
1120		6.63	20.57	0.088	15.9	3.20	0.93	22.19	
	1125	Sampled due to 2 hr cut off							

Purge data continued on next sheet?



Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

1. PROJECT INFORMATION

Project Number: T38670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: ~85°F Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 215 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: ~~31.04~~ 37.71 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-14-12 Time: 1320 Equipment Model(s) _____
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1320		6.14	24.16	0.616	4.6	9.77	9.53	31.04	technical problem
1330		6.44	21.97	0.604	-6.1	7.47	7.82	31.04	slowed process
1340		6.56	21.03	0.599	-7.1	6.97	8.89	36.04	
1350		7.44	22.32	0.605	-50.8	6.16	9.65	37.04	
1400		7.12	21.31	0.604	-23.6	6.21	9.78	39.04	

4. SAMPLING DATA

Purge data continued on next sheet? **Geochemical Analyses**
 Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-39 Zone 2 Sample Date: 8-14-12 Sample Time: 1700 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: 0
 Equipment Blank Collected? Yes No ID: FB 081412 # of Containers: 2
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

3. PURGE DATA (continued from page 21)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments	
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU			
1410		7.75	22.54	0.618	-35.1	6.41	18.9	58.04 40.79	tested lamotte	
1420		7.60	22.57	0.616	-32.6	6.68	24.4	59.04 58.2	still is calibrated	
1430		7.57	22.79	0.615	-25.7	6.24	26.5	58.65	called, Brown	
1440		7.73	25.64	0.620	-24.7	5.41	26.7	58.65 60.00	said not to worry	
		Pumps Stopped due to drawdown							Drawdown, slowed to CPM=2 w/ lower discharge	
		Originally filled in water level assuming constancy, was not, tested and write on margins								
1530		Purges restarts with longer tubing								
1530		Waiting for Refill of VSI							58.2	1 cpm
1553		Bad gasket, replaced								
1555		bad gasket again								
1615	7.55	32.44	33.44	0.639	36.8	4.18	18.3	59.98		
1625		7.49	33.25	0.631	18.6	3.82	17.1	61.75		
1635		7.51	33.21	0.624	3.6	3.77	11.9	61.75		
1645		7.05	32.00	0.617	15.3	2.94	5.60	61.90		
1655		6.89	31.38	0.614	25.6	3.54	4.71	61.90		
		Sample at 1800, 1700								
		Sampled Equipment at 1730								

40:
45f
60.00
62.2:

Purge data continued on next sheet?

Signature [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-39 Zone 3

1. PROJECT INFORMATION

Project Number: 138670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: ~70 Sunny

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 300 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 46.84 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8-15-12 Time: 0900 Equipment Model(s):
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 1 CPM gal/min Calibrated? Yes No

1. YSI
2. LaPorte
3. Bladder Pump
4. MP-50

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
900	0.10	6.48	25.74	0.111	22.7	4.64	2.76	49.99	1 CPM
910	0.20	6.51	25.61	0.166	-20.6	2.29	2.64	49.87	
920	0.25	6.81	26.19	0.168	-29.7	2.66	2.67	50.72	1 CPM
930	0.30	6.87	26.82	0.169	-28.4	3.27	2.54	50.80	Purging well, high volume
940	0.35	6.90	27.44	0.166	-26.0	3.60	4.51	51.40	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-39 Zone 3 Sample Date: 8/15/12 Sample Time: 1105 1115 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

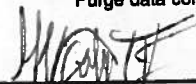
**BROWN AND
CALDWELL**

WELL ID: MW-39 Zone 3

3. PURGE DATA (continued from page 2)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
950		6.93	28.25	0.165	-21.9	3.60	4.95	52.01	1 CPM
1000		6.94	28.11	0.163	-37.4	3.68	5.10	52.87	
1010		6.91	27.77	0.163	-37.6	2.76	6.55	52.87	1 CPM
1020		6.95	28.29	0.161	-37.5	2.57	7.14	53.72	1 CPM
1030		6.95	28.90	0.161	-43.9	2.50	7.51	53.72	2 CPM
1040		6.96	29.31	0.160	-40.0	2.83	7.27	54.43	2 CPM
1050		6.09	25.15	0.156	-10.0	3.61	7.98	56.17	2 CPM
1100		5.32	23.52	0.153	25.0	2.36	8.12	57.47	2 CPM
1110		5.38	22.94	0.151	20.3	2.78	8.42	59.33	
				Sample	at	115			

Purge data continued on next sheet?



Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. KHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 32 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 7.5 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 24.5 feet Well Volume: 1.0 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/15/12 Time: 0855 Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICROPURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LA MOTTE 2020 WP

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0900		7.28	22.17	0.693	-3.2	58.8	22.0	7.5	
0910		7.27	21.90	0.536	-8.2	60.3	5.49	7.5	
0920		7.38	21.86	0.518	-19.9	60.0	1.84	7.7	
0930		7.46	21.91	0.520	-24.6	59.3	1.14	7.7	
0940		7.50	21.94	0.519	-26.2	59.5	0.92	7.6	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-41, Z1 Sample Date: 08/15/12 Sample Time: 1030 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0950		7.53	22.07	0.516	-25.2	59.0	1.37	7.6	
1000		7.55	22.10	0.512	-25.0	118.7	2.15	7.6	
1010		7.57	22.23	0.510	-25.9	113.3	1.23	7.7	
1020		7.58	22.33	0.510	-23.1	114.5	1.13	7.7	

Purge data continued on next sheet?

[Signature]
 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 2

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. WHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/15/12 Time: 1053 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LA MOTTE 2020 WE

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1057</u>		<u>7.83</u>	<u>22.27</u>	<u>0.554</u>	<u>-115.4</u>	<u>15.0</u>	<u>1.25</u>	<u>6.0</u>	
<u>1107</u>		<u>7.83</u>	<u>21.53</u>	<u>0.550</u>	<u>-123.0</u>	<u>7.8</u>	<u>0.17</u>	<u>6.0</u>	
<u>1117</u>		<u>7.83</u>	<u>21.04</u>	<u>0.549</u>	<u>-125.7</u>	<u>5.8</u>	<u>0.24</u>	<u>6.0</u>	
<u>1127</u>		<u>7.83</u>	<u>20.93</u>	<u>0.549</u>	<u>-121.8</u>	<u>4.8</u>	<u>0.61</u>	<u>6.0</u>	
<u>1137</u>		<u>7.83</u>	<u>21.53</u>	<u>0.549</u>	<u>-132.9</u>	<u>5.1</u>	<u>0.61</u>	<u>6.0</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-41, Z2 Sample Date: 08/15/12 Sample Time: 1200 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 μS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1147		7.84	21.43	0.549	-132.9	5.1	0.83		

Purge data continued on next sheet?

Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.001 Area of Concern: _____
 Client: OWENS CORNING Personnel: K. WHETSTONE
 Project Location: ANDERSON, SC Weather: CLEAR, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1" inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/15/12 Time: 1220 Equipment Model(s)
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MP5
3. SAMPLE PRO
4. LAMOTTE 2020 WE

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1255</u>		<u>7.13</u>	<u>26.75</u>	<u>0.608</u>	<u>-91.7</u>	<u>58.0</u>	<u>4.57</u>	<u>5.8</u>	
<u>1305</u>		<u>7.20</u>	<u>26.95</u>	<u>0.609</u>	<u>-93.7</u>	<u>66.9</u>	<u>4.63</u>	<u>7.6</u>	
<u>1315</u>		<u>7.37</u>	<u>27.21</u>	<u>0.607</u>	<u>-78.9</u>	<u>60.5</u>	<u>4.96</u>	<u>9.6</u>	
<u>1325</u>		<u>7.55</u>	<u>27.53</u>	<u>0.604</u>	<u>-58.6</u>	<u>61.6</u>	<u>5.14</u>	<u>10.7</u>	
<u>1335</u>		<u>7.73</u>	<u>27.88</u>	<u>0.602</u>	<u>-44.6</u>	<u>57.4</u>	<u>5.45</u>	<u>11.1</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-41, 23 Sample Date: 08/15/12 Sample Time: 1430 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41, ZONE 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345		7.88	28.03	0.600	-36.6	60.6	5.41	11.6	
1355		7.97	28.42	0.597	-32.9	60.1	5.38	12.1	
1405		7.96	29.12	0.598	-44.8	60.7	5.57	12.6	
1415		7.98	30.13	0.601	-46.6	63.6	5.61	13.2	
1425		8.02	30.59	0.601	-49.5	66.7	5.49	13.7	

Purge data continued on next sheet?

Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 42 MW-37 Zone 1

1. PROJECT INFORMATION

Project Number: T38676-140³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: K. WHESTONE
 Project Location: Anderson, South Carolina Weather: OVERCAST

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 195 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/14/12 Time: 0825 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICRO PURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LA MOTTE 2020 W/E

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>0825</u>		<u>9.67</u>	<u>20.61</u>	<u>0.219</u>	<u>-119.1</u>	<u>36.1</u>	<u>3.94</u>	<u>42.8</u>	
<u>0835</u>		<u>9.92</u>	<u>19.93</u>	<u>0.191</u>	<u>-143.8</u>	<u>28.2</u>	<u>1.31</u>	<u>42.8</u>	
<u>0845</u>		<u>10.01</u>	<u>19.59</u>	<u>0.195</u>	<u>-145.5</u>	<u>28.2</u>	<u>1.41</u>	<u>42.8</u>	
<u>0855</u>		<u>10.22</u>	<u>19.64</u>	<u>0.201</u>	<u>-154.7</u>	<u>33.4</u>	<u>1.81</u>	<u>42.8</u>	
<u>0905</u>		<u>10.37</u>	<u>19.69</u>	<u>0.208</u>	<u>-155.0</u>	<u>36.7</u>	<u>1.97</u>	<u>42.9</u>	

YSI TIME (1 hr behind)

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 42.9 Field Filtered? Yes No
 Sample ID: MW-42.21 Sample Date: 8/14/12 Sample Time: 1125 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

[Handwritten Signature]



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 42 MW-37 Zone 1

3. PURGE DATA (continued from page 1)

151 TIME
(1 hr behind)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0915		10.45	19.64	0.212	-156.6	38.1	2.25	42.9	
0925		10.55	19.72	0.219	-160.1	32.8	3.86	42.9	
0935		10.62	19.84	0.224	-166.2	32.4	2.28	42.9	
0945		10.72	19.80	0.235	-166.6	31.4	3.75	42.9	
0955		10.93	19.87	0.272	-164.4	36.8	2.08	42.9	
1005		11.21	19.96	0.333	-161.4	41.4	1.19	42.9	
1015		11.29	19.93	0.362	-161.3	42.9	1.89	42.9	
1025		11.33	20.06	0.371	-161.2	45.5	1.94	42.9	

Purge data continued on next sheet?

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: ⁴² MW-37 Zone 2

1. PROJECT INFORMATION

Project Number: ~~198670~~ ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: K. WHETSTONE
 Project Location: Anderson, South Carolina Weather: OVERCAST

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 252 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/14/12 Time: _____ Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MicroPurge MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LAMOTTE 2020 wa

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1205		7.41	21.95	0.607	-197.1	41.0	4.57	42.2	
1215		7.55	20.43	0.708	-173.6	101.1	7.48	47.1	SLOWED PUMP BY ONE CYCLE PM
1225		7.56	20.83	0.705	-169.7	104.7	7.81	52.7	SLOWED PUMP BY ONE CYCLE F
1235		7.56	21.60	0.710	-164.9	99.1	6.86	54.2	
1245		7.56	21.68	0.713	-158.9	99.3	8.29	56.4	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-42.72 Sample Date: 08/14/12 Sample Time: 1250 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 2

3. PURGE DATA (continued from page ____)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		

Purge data continued on next sheet?

GROUNDWATER SAMPLING FIELD DATA SHEET

42

WELL ID: MW-37 Zone 3

1. PROJECT INFORMATION

Project Number: ~~138670~~ 142376 Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: K. WHEISTONG
 Project Location: Anderson, South Carolina Weather: PARTLY CLOUDY, SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 272 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 08/14/12 Time: 1310 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MICROPURGE MP50
2. YSI 556 MPS
3. SAMPLE PRO
4. LA MOTTE 2020we

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1330		7.20	22.86	0.294	-179.9	131.2	4.07	73.0	
1340		7.19	22.34	0.283	-180.2	117.9	4.14	72.9	
1350		7.19	22.59	0.280	-181.2	96.0	3.93	73.0	
1400		7.20	22.47	0.278	-171.2	84.7	3.46	73.1	
1410		7.20	22.24	0.277	-165.2	80.0	5.58	73.0	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: _____ Sample Date: _____ Sample Time: 1425 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

PUMPED VERY SLOW WITH WATER DEPTH SO CLOSE TO TOP OF PUMP

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

42

WELL ID: MW-37 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1420		7.21	22.52	0.279	-169.4	76.5	3.55	73.0	

Purge data continued on next sheet?



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15 43, ZONE 1

1. PROJECT INFORMATION

Project Number: 138870¹⁴²³⁴⁶ Task Number: 200-001 Area of Concern: _____
 Client: Owens Corning Personnel: K. WHEATSTONE / G.
 Project Location: Anderson, South Carolina Weather: CLEAR & SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 21 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 21 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 99.5 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/13/12 Time: 1300 Equipment Model(s):
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1300		2.20	24.52	0.110	177.3	25.4	10.66	8.2	
1310		3.38	23.66	0.106	98.2	9.4	3.76	8.2	
1320		6.22	26.75	0.101	-43.3	9.9	2.92	8.2	
1330		6.31	26.88	0.098	-46.0	11.1	3.54	8.2	
1340		6.38	26.93	0.097	-39.5	13.0	3.38	8.2	
1350		6.44	26.90	0.097	-36.8	13.6	5.53		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 8.2 Field Filtered? Yes No
 Sample ID: MW-43, Z1 Sample Date: 8/13/12 Sample Time: 1500 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Not flush mount as labeled in Table 1 of Fieldwork Plan

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature:

GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-15⁴³, ZONE 1

3. PURGE DATA (continued from page <u>1</u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1350		6.44	26.90	0.097	-36.8	13.6	5.53	8.2	
1400		5.60	25.58	0.096	19.0	14.9	7.69	8.2	
1410		5.88	25.22	0.097	6.7	17.1	7.60	8.2	
1420		5.02	24.04	0.097	58.2	18.6	6.45	8.2	
1430		6.13	24.67	0.098	9.9	18.9	7.29	8.2	
1440		6.14	24.47	0.098	15.5	21.4	5.63	8.2	
1450		6.21	24.16	0.098	15.1	23.4	4.74	8.2	
1500		5.79	23.73	0.099	41.7	24.5	5.56	8.2	

Purge data continued on next sheet?


Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22 43, ZONE 2

1. PROJECT INFORMATION

Project Number: 438670 ¹⁴²³⁷⁶ Task Number: 200-001 Area of Concern: _____
 Client: Owens Corning Personnel: K. WHESTONE
 Project Location: Anderson, South Carolina Weather: CLEAR & SUNNY

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: 8 1/2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 8 1/2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 116 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 8/13/12 Time: 1635 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. _____
2. YSI 556 MP5
3. SAMPLE PRO
4. _____

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1635</u>		<u>7.39</u>	<u>27.60</u>	<u>0.265</u>	<u>-232.9</u>	<u>106.8</u>	<u>22.1</u>	<u>6.2</u>	
<u>1645</u>		<u>7.26</u>	<u>22.83</u>	<u>0.248</u>	<u>-222.0</u>	<u>120.3</u>	<u>1.68</u>	<u>6.7</u>	
<u>1655</u>		<u>7.26</u>	<u>22.16</u>	<u>0.246</u>	<u>-217.8</u>	<u>116.0</u>	<u>1.00</u>	<u>6.9</u>	
<u>1705</u>		<u>7.25</u>	<u>21.59</u>	<u>0.244</u>	<u>-213.2</u>	<u>111.7</u>	<u>1.18</u>	<u>7.0</u>	
<u>1715</u>		<u>7.25</u>	<u>21.22</u>	<u>0.244</u>	<u>-208.6</u>	<u>109.7</u>	<u>1.23</u>	<u>7.0</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-43.22 Sample Date: 8/13/12 Sample Time: 1725 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Not flush mount as labeled in Table 1 of Fieldwork Plan

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22 43, ZONE 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1725		7.25	20.96	0.243	-207.5	107.4	1.16	7.0	

Purge data continued on next sheet?

Signature 

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35 43 Z3

1. PROJECT INFORMATION
 Project Number: 138670 ¹⁴²³⁷⁶ Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: KW GS
 Project Location: Anderson, South Carolina Weather: ~85°F, sunny

2. WELL DATA Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 162 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: artesian feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA Date Purged: 8-13-12 Time: 16:40 Equipment Model(s):
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MP-50
2. Bladder Pump
3. YSI
4. LaMotte

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1645</u>	<u>16405</u>	<u>4.65</u>	<u>25.09</u>	<u>0.309</u>	<u>74.0</u>	<u>0.50</u>	<u>3.42</u>	<u>10.82</u>	<u>Replaced gasket</u>
<u>1655</u>	<u>6.36</u>	<u>25.07</u>	<u>0.319</u>	<u>-15.1</u>	<u>0.36</u>	<u>2.54</u>	<u>12.31</u>		
<u>1705</u>	<u>4.90</u>	<u>22.62</u>	<u>0.318</u>	<u>66.7</u>	<u>0.45</u>	<u>7.73</u>	<u>15.82</u>		<u>Slowed to 2 cycles</u>
<u>1715</u>	<u>6.49</u>	<u>23.64</u>	<u>0.317</u>	<u>-27.6</u>	<u>0.49</u>	<u>3.15</u>	<u>15.81</u>		
<u>1725</u>	<u>7.45</u>	<u>23.87</u>	<u>0.320</u>	<u>-80</u>	<u>0.53</u>	<u>3.20</u>	<u>17.81</u>		<u>Ken Franches Z1</u>

Purge data continued on next sheet?

4. SAMPLING DATA Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-43 zone 5 Sample Date: 8/13/12 Sample Time: 1645 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35 MW-43- Z3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1735		7.27	23.43	0.318	-72.7	0.54	3.02	18.11	
1745		7.47	23.88	0.319	-85.8	0.49	3.45	18.7	
1755		7.56	24.04	0.320	-96.1	0.47	3.17	19.5	
1805		7.05	22.46	0.319	-68.1	0.54	3.51	20.1	Slowed down the flow
1815		7.10	22.30	0.318	-66.3	0.45	3.12	20.5	
1825		6.67	20.15	0.317	-42.8	0.48	3.14	20.9	Leak in YSI for
1835		5.49	20.17	0.315	74.7	0.45	3.25	21.2	allowed water to
1845		6.16	19.97	0.310	-35.8	0.49	3.17	21.5	stagnant
Sample (✓) 1845 due to time									

Purge data continued on next sheet?

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-22

1. PROJECT INFORMATION

Project Number: 14376 738870 Task Number: 200-001 Area of Concern: MW-22
 Client: Owens Corning Personnel: GS
 Project Location: Anderson, South Carolina Weather: ~70 Overcast

2. WELL DATA

Date Measured: _____ Time: _____
 Casing Diameter: 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____ Temporary Well: Yes No
 Screen Diameter: 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 116 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 12.39 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 103.61 feet Well Volume: 69.1 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 9-6-12 Time: 0925
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____ Equipment Model(s):
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____ 1. YSI
 Dedicated Prepared Off-Site Field-Cleaned Disposable 2. Laffitte
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____ 3. Geosub
 Dedicated Prepared Off-Site Field-Cleaned Disposable 4. Geosub controller
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0925	1	7.7	18.73	0.254	286.5	37.7%	0.00	12.39	Ph=4.99
0935	5	5.08	18.73	0.254	278.4	35.7	0.00	12.39	
0945	10	5.17	18.71	0.254	271.4	36.1	0.03	12.39	
0955	15	5.20	18.72	0.254	265.2	36.0	0.02	12.39	
1005	20	5.21	18.72	0.254	260.4	35.7	0.03	12.39	
1015	25	5.21	18.72	0.255	255.6	35.6	0.03	12.39	

at at 35

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-22 Sample Date: 9-16 Sample Time: 1030 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

intake at ~90 ft

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 60°

2. WELL DATA

Date Measured: 11/12/12 Time: 8:00 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 65 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 25.65 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 39.35 feet Well Volume: 6.57 gal Screened Interval (from GS): 55-65
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 1545 Time: 11-12-12 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.167 gal/min Calibrated? Yes No

1. Horiba U-5000
2. Solinst NL Meter
3. LaMotte 2020
4. GeoTech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. (µS/cm) > of ±3% of ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1550	0.0	5.52	19.56	0.030	231	7.27	76	27.54	
1600	2.5	5.42	18.98	0.033	254	5.56	45.9	27.81	
1610	4.0	5.40	18.04	0.033	252	5.47	29.4	27.88	
1620	5.5	5.44	18.73	0.034	252	5.47	16.3	27.96	
1630	7.5	5.50	18.63	0.034	254	5.35	9.46	28.08	

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 28.08 Field Filtered? Yes No
 Sample ID: MW-1 Sample Date: 11/12/12 Sample Time: 1635 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: —
 Equipment Blank Collected? Yes No ID: EB11212 # of Containers: 2

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

Purge data continued on next sheet?

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell
 Signature

WELL ID: MW-2

1. PROJECT INFORMATION

Project Number: 14 0132 Task Number: 200 XXX Area of Concern: CC
 Client: Owens Corning Personnel: Jim Nunez
 Project Location: Anderson, SC Weather: 50°F, cloudy

2. WELL DATA

Date Measured: 11-13-12 Time: 900 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 66.7 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 22.92 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 24.32 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 42.88 feet Well Volume: 2.08 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 900 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: .2 gal/min Calibrated? Yes No

1. Geo Sub
2. Heron 4LM
3. Lamotte 2020
4. YSI 556

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>0905</u>	<u>1</u>	<u>5.16</u>	<u>19.77</u>	<u>.077</u>	<u>319</u>	<u>8.55</u>	<u>54.0</u>	<u>29.20</u>	
<u>0920</u>	<u>2.5</u>	<u>5.10</u>	<u>19.79</u>	<u>.066</u>	<u>333</u>	<u>9.15</u>	<u>16.1</u>	<u>29.41</u>	
<u>0925</u>	<u>4.0</u>	<u>5.37</u>	<u>19.91</u>	<u>.066</u>	<u>321</u>	<u>8.60</u>	<u>9.37</u>	<u>29.44</u>	
<u>0930</u>	<u>5.0</u>	<u>5.40</u>	<u>19.93</u>	<u>.066</u>	<u>320</u>	<u>8.48</u>	<u>7.94</u>	<u>29.20</u>	
<u>0935</u>	<u>6.0</u>	<u>5.50</u>	<u>19.95</u>	<u>.066</u>	<u>315</u>	<u>8.16</u>	<u>7.2</u>	<u>29.19</u>	

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-2 Sample Date: 11-13-12 Sample Time: 1045 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: EB-111312 # of Containers: 2

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample collected @ 1045 on 11-13-12, Jim
from EB collected @ 1120

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Jim Nunez
Signature

WELL ID: M6-2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0940	7	5.54	19.23	.034	317	10.08	4.13	26.78	controller shutdown
0945	7.5	5.86	19.88	.066	295	9.50	6.14	30.9	
0950	9.0	5.70	20.05	.064	304	9.18	6.72	31.9	
0955	10.5	5.82	20.03	.065	298	8.74	6.09	30.51	
1000	12.0	6.00	20.00	.065	288	8.34	3.11	29.82	
1005	13.5	6.10	20.07	.065	281	7.95	1.36	29.71	
1010	14.0	6.12	20.09	.064	279	7.72	3.23	30.26	
1015	14.5	6.13	20.09	.064	278	7.54	1.21	30.23	API arrived on well M-2
1025	16.5	6.14	20.08	.064	276	7.33	0.90	30.54	
1030	17.0 17.5	6.11	20.10	.064	276	6.81	3.39	26.81	
1045	20.00	6.05	19.86	.065	280	6.95	12.05	26.3	collected samples @ 1045

Purge data continued on next sheet?

Janet
Signature

WELL ID: MW-3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Elleen Russell
 Project Location: Anderson, SC Weather: Sunny, 60°

2. WELL DATA

Date Measured: 11/12/12 Time: 800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 28 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 21.82 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 6.18 feet Well Volume: 1.03 gal Screened Interval (from GS): 13-28
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 1415 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.143 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst ml Meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spes. Cond. ms/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1415	0	4.89	18.19	0.052	320	5.32	685 AU	22.19	
1425	2	4.85	18.49	0.050	330	1.79	78.8	22.21	
1435	4	4.84	18.74	0.050	336	1.45	16.6	22.19	
1445	5	4.82	18.88	0.050	343	1.82	5.67	22.24	
1455	EMR	11/13/12							

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 22.24 Field Filtered? Yes No
 Sample ID: MW-3 Sample Date: 11/13/12 Sample Time: 1450 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Elleen Russell

Signature

WELL ID: 11W-4

1. PROJECT INFORMATION

Project Number: 140 2137 Task Number: 200-XXX Area of Concern: OC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: 60°F, cloudy

2. WELL DATA

Date Measured: 11-13-12 Time: 1150 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 29.7 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 22.83 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 240 feet Well Volume: 1.23 gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 1200 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

1. YSI 556
2. Geo Sub
3. Lamotte 2020
4. Heron WLM

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Volume to Purge (minimum): _____ well volumes or 1.23 gallons

Was well purged dry? Yes No Pumping Rate: 0.3 gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1200	1	6.68	19.60	.854	20	2.67	143	2340	
1205	2.5	6.65	19.82	.861	9	2.59	25	2438	
1210	3.5	6.50	19.87	.864	16	6.54	8.84	2530	
1215	5.00	6.67	19.96	.879	-17	0.0	2.73	2574	
1220	6.0	6.70	19.94	.877	20	0.0	2.02	26.12	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Depth to Water at Time of Sampling: WA Field Filtered? Yes No

Sample ID: 11W-4 Sample Date: 11-13-12 Sample Time: 1310 # of Containers: 2

Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____

Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

sample collected @ 1310 on 11-13-12,

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Juan Nunez
Signature

WELL ID: W10-4

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1225	7.5	6.74	19.90	.874	-26	0.0	2.61	26.51	
1230	9.0	6.73	19.87	.869	-24	0.0	4.80	27.01	
1235	10.5	6.71	19.89	.867	-24	0.0	3.75	27.29	
1240	11.5	6.62	20.04	.855	12	8.72	10.83	27.29	
1245	12.5	6.70	19.96	.855	7	8.36	12.63	27.70	
1250	14.00	6.58	19.95	.868	19	7.54	10.20	(27.7)	
1255	15.5	6.73	19.60	.847	-25	6.83	301	-	Unable to get WL, Pump on way.
1300	16.5	6.75	19.75	.850	-38	6.35	99.7	-	4'
1305	17.5	6.60	19.75	.860	-8	5.51	224	-	Pump is dry

Purge data continued on next sheet?


Signature

WELL ID: MW-5

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 200-XXXX Area of Concern: CC
 Client: Owens Corning Personnel: John Numbert
 Project Location: Anderson, SC. Weather: sunny 65°F

2. WELL DATA

Date Measured: 11-13-12 Time: 1500 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 27 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 19.39 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 7.61 feet Well Volume: 1.27 gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 1500 1450 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Volume to Purge (minimum): _____ well volumes or 1.27 gallons

Was well purged dry? Yes No Pumping Rate: 2.2 gal/min Calibrated? Yes No

1. Geo Sub
2. Comtek 2020
3. Heron 4LM
4. YSI 556

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1450	1	5.89	19.95	.389	107	3.95	93.7	19.40	
1455	2.5	4.20	19.75	.059	401	0.00	17.5	22.84	
1500	3.5	4.39	19.60	.059	407	0.00	3.77	23.09	
1505	5.0	4.41	19.55	.059	431	0.00	2.28	23.29	
1510	6.0	4.55	19.5	.059	446	0.00	1.05	23.45	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Depth to Water at Time of Sampling: 23.20 Field Filtered? Yes No

Sample ID: MW-5 Sample Date: 11-13-12 Sample Time: 1607 # of Containers: 2

Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____

Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Sample taken @ 1607 11-13-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-5

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1515	7.5	4.58	19.47	.060	455	0.00	.80	23.40	
1520	8.5	4.57	19.51	.060	464	0.00	1.04	23.13	
1525	10.0	4.51	19.44	.060	488	0.00	0.76	22.90	
1530	11.0	4.48	19.48	.060	496	0.00	.70	22.86	
1535	12.0	4.48	19.48	.060	515	0.00	1.05	22.85	
1540	13.0	4.47	19.51	.060	539	0.00	1.49	22.99	
1545	14.0	4.47	19.50	.059	546	0.00	.53	23.01	
1550	15.0	4.47	19.48	.060	552	0.00	.51	23.02	
1555	16.0	4.47	19.48	.060	560	0.00	.64	22.95	
1600	17.5	4.49	19.47	.059	568	0.00	.63	23.06	
1605	18.5	4.50	19.46	.059	576	0.00	.52	23.10	
1610 1610	19.5	4.49	19.47	.059	581	0.00	.60	23.12	

Purge data continued on next sheet?

Signature: [Signature]

WELL ID: MW-6

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 289 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 58°

2. WELL DATA

Date Measured: 11/12/12 Time: 800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 133.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 20.79 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 112.81 feet Well Volume: 18.84 gal Screened Interval (from GS): 123.6-133.6
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 1735 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.121 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst WL meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ms/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1735	0	7.41	18.75	0.115	100	4.30	1.96	22.22	
1745	2.0	7.14	19.27	0.113	114	1.77	0.10	22.12	
1755	3.5	7.10	19.30	0.113	121	1.34	-0.30	22.04	
1805	4.23	7.06	19.19	0.113	127	0.90	-0.26	21.46	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 21.46 Field Filtered? Yes No
 Sample ID: MW-6 Sample Date: 11/13/12 Sample Time: 1810 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

WELL ID: MW-7

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 50°

2. WELL DATA

Date Measured: 11/17/12 Time: 0800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 30.9 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 20.49 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 10.41 feet Well Volume: 1.74 gal Screened Interval (from GS): 15.9-30.9
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/16/12 Time: 1050 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.167 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2000
3. Heron WL Meter
4. GeoTech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. mg/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1050	0	4.54	20.95	1.76	297	4.91	40.6	20.86	
1055	1.5	4.51	21.46	1.72	291	5.04	24.1	21.35	
1100	2.25	4.50	22.03	1.44	288	1.62	11.62	21.83	
1105	3.5	4.50	21.96	1.46	285	0.00	5.68	21.94	
1110	4.25	4.50	22.00	1.47	283	0.00	1.24	22.49	

Purge data continued on next sheet? Yes

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 22.88 Field Filtered? Yes No
 Sample ID: MW-7 Sample Date: 11/16/12 Sample Time: 1120 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Slight odor

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-7

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1115	5.0	4.50	22.10	1.50	285	0.00	0.58	22.88	

Purge data continued on next sheet?

Eileen Russell

Signature

WELL ID: MW-9

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 20774 Area of Concern: DC
 Client: Owens Corning Personnel: Jan Nunez
 Project Location: Anderson, SC Weather: Sunny 50F

2. WELL DATA

Date Measured: 1-13-12 Time: 1700 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 104 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 20.73 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 83.27 feet Well Volume: 13.91 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 1-13-12 Time: 1715 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 13.91 gallons
 Was well purged dry? Yes No Pumping Rate: .18 gal/min Calibrated? Yes No

1. VSI 556
2. Geofub
3. Lamotte 2020
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1715	1	6.09	20.97	.101	342	8.05	8.47	22.70	
1720	2.5	6.26	21.01	.097	348	6.79	4.46	25.80	
1725	3.5	6.39	21.14	.093	354	5.48	1.56	25.87	
1730	4.5	6.36	21.12	.091	345	5.54	1.28	26.35	
1735	5.0	6.36	21.08	.091	342	5.68	.76	24.46	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-9 Sample Date: 1-13-12 Sample Time: 1744 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample collected @ 1744 on 1-13-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: HW-9

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1740	5.5	6.35	21.02	590	336	5.89	1.45	26.52	
1744	6.0	6.35	20.96	589	331	6.05	1.23	26.48	

Purge data continued on next sheet?

Signature Jacob [Signature]

WELL ID: MW-10

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 290 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 50°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 71.4 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 27.69 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: - feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 43.71 feet Well Volume: 7.30 gal Screened Interval (from GS): 61.4-71.4
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 1030 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.144 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst ML Meter
4. Geotech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. <u>MS/cm</u> > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1030</u>	<u>0</u>	<u>5.29</u>	<u>18.18</u>	<u>0.080</u>	<u>327</u>	<u>6.16</u>	<u>214</u>	<u>28.52</u>	
<u>1040</u>	<u>2.75</u>	<u>5.29</u>	<u>19.45</u>	<u>0.029</u>	<u>361</u>	<u>5.55</u>	<u>54.3</u>	<u>28.49</u>	
<u>1050</u>	<u>4.5</u>	<u>5.38</u>	<u>19.64</u>	<u>0.029</u>	<u>357</u>	<u>5.68</u>	<u>18.8</u>	<u>28.50</u>	
<u>1100</u>	<u>5.5</u>	<u>5.37</u>	<u>19.79</u>	<u>0.028</u>	<u>351</u>	<u>5.88</u>	<u>23.9</u>	<u>28.45</u>	
<u>1110</u>	<u>6.5</u>	<u>5.39</u>	<u>19.81</u>	<u>0.029</u>	<u>352</u>	<u>5.68</u>	<u>25.4</u>	<u>28.47</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 28.47 Field Filtered? Yes No
 Sample ID: MW-10 Sample Date: 11/13/12 Sample Time: 115 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: - # of Containers: -
 Equipment Blank Collected? Yes No ID: - # of Containers: -

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature Eileen Russell

WELL ID: MW-11

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 200-2222 Area of Concern: OC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: 50°F, cloudy

2. WELL DATA

Date Measured: 11-15-12 Time: 8:15 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 16.0 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 17.90 3.10 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 8.9 feet Well Volume: 149 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 8:20 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 149 gallons
 Was well purged dry? Yes No Pumping Rate: 12.15 gal/min Calibrated? Yes No

1. YSI 556
2. Hera WTM
3. Geofab
4. Lamb He 2020

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
820	.5	5.41	12.75	.776	149	8.78	79.9	2.11	
825	1.0	6.10	18.01	.656	9	0.00	70.0	7.60	
830	1.5	6.23	19.88	.601	-22	0.00	19.5	7.79	
835	2.5	6.27	19.54	.578	-51	0.00	12.17	7.84	
840	3.5	6.28	19.58	.575	-58	0.00	6.77	7.94	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 8.17 Field Filtered? Yes No
 Sample ID: MW-11 Sample Date: 11-15-12 Sample Time: 8:57 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample taken @ 8:57 on 11-14-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-11

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
845	5.0	6.29	19.65	.572	-62	0.00	5.02	8.04	
850	6.0	6.30	19.65	.570	-64	0.00	2.71	8.06	
855	7.5	6.31	19.68	.570	-65	0.00	1.96	8.08	

Purge data continued on next sheet?

[Signature]
Signature

WELL ID: MW-12

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 50°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 33 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 7.90 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 25.1 feet Well Volume: 4.192 gal Screened Interval (from GS): 23-33

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/15/12 Time: 1335 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 0.138 gallons
 Was well purged dry? Yes No Pumping Rate: 0.138 gal/min
 Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst WL Meter
4. Geotech pump
Maxmarine battery 15V

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. mS/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1335	0	5.29	16.21	0.001	224	13.01	76.8	9.33	
1345	2	5.71	17.47	0.148	218	0.00	42.3	16.31	
1350	3	5.70	17.54	0.148	223	0.00	23.2	16.51	
1355	3.5	5.70	17.56	0.148	212	0.00	19.5	16.66	
1400	4.0	5.69	17.67	0.149	186	0.00	8.36	17.18	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 17.02 Field Filtered? Yes No
 Sample ID: MW-12 Sample Date: 11/15/12 Sample Time: 1415 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-12

✓ ✓ ✓

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1405	5.0	5.68	17.64	0.149	179	0.00	7.01	17.09	
1410	5.5	5.67	17.72	0.148	182	0.00	4.87	17.02	

Purge data continued on next sheet?

 Eileen Russell
Signature

WELL ID: MW-13

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 55°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 72 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 10.16 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 6.84 feet Well Volume: 10.33 gal Screened Interval (from GS): 67-72
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/15/12 Time: 1450 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.192 gal/min
 1. Horiba U-51
 2. LaMotte 2020
 3. Solinst WL Meter
 4. Geotech pump
Maxx Marine 12V Battery
 Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ms/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1450	0	5.63	17.95	0.123	213	9.53	0.69	10.17	
1500	3.0	5.51	17.97	0.119	253	3.57	0.27	10.22	
1510	5.25	5.52	18.02	0.119	260	3.19	-0.04	10.25	sample turbidity is lower than blank
1520	7.5	5.52	18.00	0.119	265	3.04	-0.06	10.22	"
1530	9.5	5.52	18.03	0.119	269	2.87	-0.05	10.26	"

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 10.32 Field Filtered? Yes No
 Sample ID: MW-13 Sample Date: 11/15/12 Sample Time: 1535 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

~~Geochemical Analyses~~
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-13

3. PURGE DATA (continued from page <u>1</u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	<i>ms/cm</i> > of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1540	11.00	5.52	17.98	0.118	271	4.33	-0.06	10.30	Sample turbidity is lower than blank
1550	12.5	5.52	17.92	0.118	271	2.76	-0.03	10.32	"

Purge data continued on next sheet?

Eileen Russell
Signature

WELL ID: MW-14

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny/Cloudy, 50°

2. WELL DATA

Date Measured: 11/12/12 Time: 8:00 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 74.2 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 23.16 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 51.04 feet Well Volume: 8.62 gal Screened Interval (from GS): 69.2 - 74.2
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 12:10 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 0.186 gallons
 Was well purged dry? Yes No Pumping Rate: 0.186 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst WL meter
4. GeoTech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. mg/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1210	0	6.29	18.29	0.070	258	8.63	22.3	26.71	
1220	3.5	6.35	18.48	0.069	287	4.99	13.5	27.29	
1230	4.5	6.38	18.64	0.067	291	4.44	9.48	26.88	
1240	6.5	6.34	18.57	0.066	295	4.33	5.64	26.91	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 26.91 Field Filtered? Yes No
 Sample ID: MW-14 Sample Date: 11/13/12 Sample Time: 1245 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

WELL ID: MW-15

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 43°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 99.5 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 26.40 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 73.1 feet Well Volume: 12.21 gal Screened Interval (from GS): 69.5-99.5
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/15/12 Time: 1025 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.135 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst WL-Meter
4. Geotech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ns/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1025	0	7.18	15.75	0.208	129	7.85	8.58	26.79	
1035	1.25	7.54	16.45	0.244	-41	2.00	4.75	29.96	
1045	2.75	7.20	16.71	0.212	24	0.84	2.81	30.42	
1055	4.25	7.01	16.78	0.203	57	0.19	1.16	30.22	
1105	5.75	6.96	16.84	0.200	72	0.00	0.64	31.37	

Purge data continued on next sheet? Yes

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 31.45 Field Filtered? Yes No
 Sample ID: MW-15 Sample Date: 11/15/12 Sample Time: 1150 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses

Ferrous/Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-15

✓ ✓ ✓

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1115	7.0	6.93	16.85	0.199	78	0.00	0.50	31.50	
1125	8.5	6.91	16.88	0.198	79	0.00	0.25	31.52	
1135	10.0	6.90	16.90	0.196	80	0.00	0.20	31.52	
1145	11.5	6.89	16.86	0.196	80	0.00	0.17	31.45	

Purge data continued on next sheet?

Eileen Russell
Signature

WELL ID: MW-16

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 62°

2. WELL DATA

Date Measured: 8/11/12/11 Time: 800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 59 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 30.98 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 2802 feet Well Volume: 4.679 gal Screened Interval (from GS): 49-59
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 1540 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.082 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst ML meter
4. GeoTech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ms/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1540	0	6.93	17.50	0.302	-36	0.31	8.43	15.38	
1550	<u>0.5</u>	7.16	17.82	0.306	-73	0.00	11.90	18.14	
1600	2.5	7.20	17.59	0.303	-70	0.00	5.82	22.56	
1610	3.0	7.19	17.43	0.301	-51	0.00	3.17	25.09	
1620	3.75	7.20	17.39	0.303	-47	0.00	2.30	28.56	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 32.06 Field Filtered? Yes No
 Sample ID: MW-16 Sample Date: 11/13/12 Sample Time: 1635 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-16

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH <small>±0.1 su</small>	Temp <small>±2°C</small>	Spec. Cond. <small>> of ±3% or ±10 µS/cm</small>	ORP <small>> of ±10% or ±20 mV</small>	DO <small>> of ±10% or ±0.2 mg/L</small>	Turbidity <small>≤ 10 NTU</small>	Water Level	Comments
1630	4.5	7.21	17.53	0.307	-48	0.00	2.59	32.06	

Purge data continued on next sheet?

Gillen Russell
Signature

WELL ID: MW-17

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 50°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 4 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 4 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 39.1 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 23.95 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 15.15 feet Well Volume: 10.11 gal Screened Interval (from GS): 24.1-39.1
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/13/12 Time: 0900 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.24 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Sollinst ML Meter
4. Geotech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. mS/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0900	0	4.82	18.61	0.123	334	3.96	34.7	24.37	
0910	3.0	4.93	19.37	0.115	342	3.93	10.90	24.37	
0920	5.5	4.95	19.40	0.112	338	3.75	4.16	24.36	
0930	7.5	5.02	19.47	0.112	343	3.98	1.52	24.41	
0940	9.5	5.03	19.41	0.111	343	3.82	0.19	24.35	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 24.35 Field Filtered? Yes No
 Sample ID: MW-17 Sample Date: 11/13/12 Sample Time: 0945 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: DUP-111312 # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

Signature

WELL ID: MW-18

1. PROJECT INFORMATION

Project Number: 14 2376 Task Number: 200-75X Area of Concern: DC
 Client: Owens Corning Personnel: Juan Nunoz
 Project Location: Anderson, South Carolina Weather: Rainy, 65°F

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 2 Inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 Inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 25.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 24.42 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 24.42 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 1.18 feet Well Volume: .197 gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1615 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Volume to Purge (minimum): _____ well volumes or .197 gallons

Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1620	1	5.13	21.05	.095	244	1.97	103.9	25.70	well is getting dry
1635	2.0	5.08	21.65	.083	277	2.03	29.9	25.70	"

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Depth to Water at Time of Sampling: 25.60 Field Filtered? Yes No

Sample ID: MW-18 Sample Date: 11-12-12 Sample Time: 1647 # of Containers: 2

Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____

Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

sample time 1647, Date 11-12-12, well
went dry after 2 gallons.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Juan Nunoz
 Signature

WELL ID: MW-19

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 40°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 169 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 12.60 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 156.4 feet Well Volume: 26.12 gal Screened Interval (from GS): 154-169
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/15/12 Time: 825 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.131 gal/min
 Calibrated? Yes No

1. Horiba U-51
2. LaMotte 2020
3. Solinst ML Meter
4. GeoTech Pump
Maxx Marine battery

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>825</u>	<u>0</u>	<u>6.11</u>	<u>15.65</u>	<u>0.204</u>	<u>275</u>	<u>6.08</u>	<u>0.92</u>	<u>13.36</u>	
<u>835</u>	<u>2.0</u>	<u>6.94</u>	<u>16.96</u>	<u>0.197</u>	<u>-30</u>	<u>0.00</u>	<u>-0.34</u>	<u>13.42</u>	<u>turbidity is lower than blank</u>
<u>845</u>	<u>3.5</u>	<u>7.10</u>	<u>16.80</u>	<u>0.227</u>	<u>-40</u>	<u>0.00</u>	<u>-0.01</u>	<u>13.42</u>	<u>"</u>
<u>855</u>	<u>4.25</u>	<u>7.09</u>	<u>16.97</u>	<u>0.219</u>	<u>-32</u>	<u>0.00</u>	<u>-0.01</u>	<u>13.48</u>	<u>"</u>
<u>905</u>	<u>5.5</u>	<u>7.04</u>	<u>17.05</u>	<u>0.209</u>	<u>-23</u>	<u>0.00</u>	<u>-0.28</u>	<u>13.55</u>	<u>"</u>

Purge data continued on next sheet?

4. SAMPLING DATA

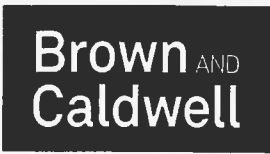
Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 1388 Field Filtered? Yes No
 Sample ID: MW-19 Sample Date: 11/15/12 Sample Time: 0930 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-19

3. PURGE DATA (continued from page <u>1</u>) ✓ ✓									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	^{ms/cm} > of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0915	7.0	7.02	17.11	0.206	-19	0.00	-0.66	14.81	Sample turbidity is lower than blank
0925	8.5	7.02	17.53	0.203	-21	0.00	-0.54	13.88	"

Purge data continued on next sheet?

Eileen Russell
Signature

WELL ID: 1420

1. PROJECT INFORMATION

Project Number: 14137 Task Number: 200-200 Area of Concern: OC
 Client: Udens Corning Personnel: Jean Nunez
 Project Location: Anderson, SC Weather: sunny, 55°f

2. WELL DATA

Date Measured: 11-15-12 Time: 1420 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 67 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 23:83 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 43.17 feet Well Volume: 7.21 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1620 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 7.21 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. VSI 556
2. La Motte 2020
3. Geo Sub
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1620</u>	<u>.5</u>	<u>5.56</u>	<u>20.43</u>	<u>.092</u>	<u>153</u>	<u>4.79</u>	<u>29.3</u>	<u>24.14</u>	
<u>1625</u>	<u>2.0</u>	<u>5.21</u>	<u>20.54</u>	<u>.080</u>	<u>215</u>	<u>4.60</u>	<u>12.4</u>	<u>24.10</u>	
<u>1630</u>	<u>3.0</u>	<u>5.02</u>	<u>20.24</u>	<u>.100</u>	<u>285</u>	<u>4.66</u>	<u>5.04</u>	<u>24.10</u>	
<u>1635</u>	<u>5.5</u>	<u>5.06</u>	<u>20.75</u>	<u>.111</u>	<u>300</u>	<u>4.71</u>	<u>3.73</u>	<u>24.16</u>	
<u>1640</u>	<u>7.5</u>	<u>5.12</u>	<u>20.80</u>	<u>.115</u>	<u>303</u>	<u>4.63</u>	<u>3.29</u>	<u>24.15</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 1420 Sample Date: 11-15-12 Sample Time: 1656 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample taken @ 1656 on 11-15-12.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MU-20

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1640	10.0	5.16	20.79	.119	305	4.56	1.80	24.15	
1645	11.5	5.21	20.80	.121	306	4.35	1.62	24.15	
1650	14.0	5.22	20.81	.123	307	4.21	1.01	24.15	
1655	15.5	5.23	20.81	.123	308	4.27	.79	24.15	

Purge data continued on next sheet?


Signature

WELL ID: MW-21

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Dwens Coming Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sun/Clouds, 40°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 16.5 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 8.21 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 8.29 feet Well Volume: 1.384 gal Screened Interval (from GS): 6.5-16.5
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/14/12 Time: 825 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.129 gal/min Calibrated? Yes No

1. Atoriba U-51
2. La Motte 2020
3. Solinst M. Meter
4. GeoTech Pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. µS/cm > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
825	0	5.33	16.17	0.069	308	11.73	717AU	8.11	
835	2.5	5.46	17.04	0.063	314	9.69	52.4	8.12	
845	3.75	5.46	17.26	0.063	313	9.12	20.1	8.12	
855	4.5	5.48	17.43	0.062	313	8.59	9.14	8.12	
Sample Collected		EMP- 11/14/12-							

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 8.12 Field Filtered? Yes No
 Sample ID: MW-21 Sample Date: 11/14/12 Sample Time: 0900 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

Signature

WELL ID: MW-22

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 50°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No
 Casing Diameter: ^{meas} 7 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: ^{meas} 7 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 116 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 12.37 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 103.63 feet Well Volume: ^{meas} 59.12 gal Screened Interval (from GS): 78-116
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/15/12 Time: 1725 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min
 1. Horiba U-51
 2. La Motte 2020
 3. Solinst WL Meter
 4. GeoTech Pump
Maxx Marine 12V Battery
 Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1725	0	5.49	16.49	0.140	262	5.30	-0.31	13.33	Sample turbidity is lower than blank
1730	6.5	5.53	16.78	0.140	282	2.30	-0.06	13.40	"
1735	11.0	5.53	16.84	0.140	286	2.23	-0.06	13.40	"
1740	14.0	5.56	16.89	0.139	287	2.08	-0.02	13.41	"
1745	17.0	5.56	16.69	0.140	287	1.84	0.05	13.39	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 13.39 Field Filtered? Yes No
 Sample ID: MW-22 Sample Date: 11/15/12 Sample Time: 1750 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

WELL ID: MW-24

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Cloudy, 52°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 71 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 11.61 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 9.97 feet Well Volume: 9.92 gal Screened Interval (from GS): 71-81
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/14/12 Time: 1655 Equipment Model(s)

Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.138 gal/min Calibrated? Yes No

1. Horiba U-51
2. LaMotte 2020
3. Solinst WLMeter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ms/cm > of ±8% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1655	0	8.65	19.24	0.143	104	3.56	27.9	13.41	
1705	1.0	6.37	19.60	0.140	166	1.30	14.5	14.97	
1715	2.0	5.95	19.56	0.138	179	1.00	10.00	16.66	
1725	3.0	5.80	19.58	0.137	188	0.82	5.63	17.82	
1735	4.5	5.71	19.76	0.138	198	0.55	3.46	18.94	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 18.95 Field Filtered? Yes No
 Sample ID: MN-24 Sample Date: 11/14/12 Sample Time: 1755 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
~~Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L~~

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-24

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	ms/cm > of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1745	6.25	5.67	19.65	0.137	206	0.70	2.52	18.83	
1755	8.25	5.67	19.69	0.137	212	0.68	1.84	18.95	

Purge data continued on next sheet?

Eileen Russell
Signature

WELL ID: M10-25

1. PROJECT INFORMATION

Project Number: 142437 Task Number: 200-xxx0 Area of Concern: OC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: Clear skies, 40°F

2. WELL DATA

Date Measured: 11-14-12 Time: 825 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 80 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 12.63 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 37.37 feet Well Volume: 6.24 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 830 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 6.24 gallons
 Was well purged dry? Yes No Pumping Rate: 3 gal/min Calibrated? Yes No

1. YSI 556
2. Heron WLM
3. Camotte 2020
4. Geo Sub

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
830	1	5.00	17.11	.065	222	4.94	85.9	14.44	
835	2.5	5.00	17.28	.061	167	5.03	23.3	15.57	
840	4.0	4.96	17.75	.058	137	5.12	10.38	15.02	
845	5.5	5.04	17.76	.055	158	5.07	6.40	14.74	
850	7.5	5.10	17.77	.055	161	4.99	5.85	14.70	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 14.06 Field Filtered? Yes No
 Sample ID: M10-25 Sample Date: 11-14-12 Sample Time: 904 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample collected @ 904 on 11-14-12, Well is missing cap

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature Juan Nunez

WELL ID: 116-25

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
8:55	10:00	5.16	17.78	.055	170	4.98	4.93	14.41	
9:00	11:5	5.19	17.78	.055	178	4.94	2.74	14.66	

Purge data continued on next sheet?


Signature _____

WELL ID: MW-26

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 100-XXX Area of Concern: OC
 Client: Owens Corning Personnel: Juan Perez
 Project Location: Anderson, SC Weather: 45°F, clear skies

2. WELL DATA

Date Measured: 11-14-12 Time: 1000 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 66.7 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 20.56 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 46.14 feet Well Volume: 7.70 gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1010 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 7.70 gallons
 Was well purged dry? Yes No Pumping Rate: .1 gal/min Calibrated? Yes No

1. Gen Sub
2. La Motte 2020
3. YSI 556
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1015	1 1	5.63	17.58	.059	186	4.26	2280 139	22.80	
1020	2	6.27	17.53	.064	195	3.37	236	25.80	
1025	2.5	6.31	17.88	.064	206	3.60	301	26.49	
1030	3.0	6.30	17.96	.064	208	3.59	302	27.09	
1035	3.5	6.28	18.15	.064	213	3.58	174	28.84	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 54.92 Field Filtered? Yes No
 Sample ID: MW-26 Sample Date: 11-14-12 Sample Time: 1216 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

sample taken @ 1216 on 11-14-12, +

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: HW-26

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1040	5.00	6.33	18.26	.064	218	3.62	395	28.16	
1045	5.5	6.33	18.18	.064	217	3.47	219	30.54	
1050	6.5	6.33	18.09	.064	219	3.62	136	30.30	
1055	7.0	6.33	18.34	.064	221	3.60	288	31.44	
1100	7.5	6.32	18.37	.064	223	3.60	128	31.81	
1105	8.5	6.32	18.49	.064	226	3.54	84.9	33.49	
1110	9.0	6.26	18.58	.064	233	3.93	108.5	32.85	
1115	10.5	6.39	18.49	.064	227	3.79	71.9	38.11	
1120	11.0	6.40	18.49	.064	227	3.77	177	38.83	
1125	11.5	6.37	18.65	.064	227	3.66	97.0	38.95	
1130	12.0	6.52	18.60	.065	227	6.30	124.0	39.33	
1135	13.0	6.43	18.47	.065	228	5.12	157.0	40.21	
1140	14.0	6.85	18.79	.065	224	3.51	^{94.4} 157.0	43.06	
1145	15.0	6.37	18.86	.065	219	3.69	81.4	44.00	
1150	16.0	6.36	18.92	.065	219	3.61	95.0	46.19	
1155	17.0	6.44	18.73	.065	218	4.37	135.0	46.09	
1200	18 ^{7.5}	6.41	18.58	.065	216	4.40	126.0	45.55	
1205	18.0	6.32	18.99	.065	218.5	3.62	108.6	47.84	
1210	19.0	6.31	18.97	.066	177	3.41	199.0	51.91	
1215	20.0	6.34	18.97	.066	175	3.53	92	54.00	

Purge data continued on next sheet?

Signature *[Handwritten Signature]*

WELL ID: MW-27

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 200-222 Area of Concern: CC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: cloudy, 50F

2. WELL DATA

Date Measured: _____ Time: 1000 Temporary Well: Yes No

Casing Diameter: 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 8 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 99' feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 23.99 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 23.99 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 750 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1005 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 20-25 gal/min 3.0 gal/min Calibrated? Yes No

1. YSI 556
2. GeoSub
3. CarloHe 2020
4. Aeron VLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1005	.5	7.34	18.88	.165	-54	9.79	3.58	24.16	
1010	1.5	7.52	20.25	.165	-41	0.44	6.70	24.18	
1015	2.5	7.48	20.47	.161	-36	0.00	5.52	24.20	
1020	3.5	7.41	20.50	.156	-28	0.00	4.00	24.20	
1025	5.0	7.34	20.51	.148	-19	0.00	2.48	24.20	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-27 Sample Date: 11-15-12 Sample Time: 1315 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Pump dies before able to take samples, pump worked long enough to obtained samples @ 1315. on 11-15-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-27

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1030	6.00	7.33	20.51	.145	-15	0.00	2.63	24.20	
1035	7.00	7.36	20.37	.144	-22	0.0 2.73	4.17	24.15	
1040	8.00	7.18	20.60	.127	4	.51	2.63	24.24	
1045	10.00	7.13	20.60	.125	14	0.00	2.27	24.25	
1050	11.5	7.03	20.63	.123	38	0.00	2.17	24.50	
1055	13.0	6.97	20.61	.122	50	0.00	1.98	24.54	
1100	15.0	6.99	20.60	.122	52	0.00	1.45	24.26	
1105	17.0	7.02	20.60	.121	54	0.00	1.41	24.21	
1110									

Purge data continued on next sheet?

[Signature]
Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-28
MW-37 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: OC
Client: Owens Corning Personnel: Juan Nunez
Project Location: Anderson, South Carolina Weather: Sunny 60%

2. WELL DATA

Date Measured: 11-16-12 Time: 1215 Temporary Well: Yes No

Casing Diameter: 7.2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
Screen Diameter: 7.2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
Total Depth of Well: 31 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
Depth to Product: 21.30 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
Length of Water Column: 9.7 feet Well Volume: 1.62 gal Screened Interval (from GS): _____
Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-16-12 Time: 12 20 Equipment Model(s):

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
Volume to Purge (minimum): _____ well volumes or 1.62 gallons
Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. Geo Sub
2. VSI 556
3. Cam. Hk 2020
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1220	.5	5.49	20.20	950	173	1.04	49.1	24.54	
1225	1.5	4.52	21.75	2.21	187	0.00	179	24.91	
1230	2.5	4.39	21.29	2.59	193	0.00	262	26.73	
1235	3.5	4.34	21.31	2.73	212	0.00	73.5	28.28	
1240	4.0	4.27	21.58	2.97	253	2.60	11.67	29.03	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
Depth to Water at Time of Sampling: 28.44 Field Filtered? Yes No
Sample ID: MW-28 Sample Date: 11-16-12 Sample Time: 1302 # of Containers: 2
Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
Ferrous Iron: _____ mg/L
DO: _____ mg/L
Nitrate: _____ mg/L
Sulfate: _____ mg/L
Alkalinity: _____ mg/L

5. COMMENTS

sample taken @ 1302 on 11-16-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

**BROWN AND
CALDWELL**

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-28
MW-37 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1245	5.00	4.27	21.59	2.98	257	3.03	7.81	29.32	
1250	5.5 5.5	4.27	21.65	3.04	262	3.05	5.92	29.17	
1255	6.0	4.27	21.88	2.96	269	2.96	9.58	29.69	

Purge data continued on next sheet?

Signature [Signature]

WELL ID: MW-29R-Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: M
 Project Location: Anderson SC Weather: 60°F Sunny

2. WELL DATA

Date Measured: 11-12-11 Time: AM Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 6 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 194-169 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 6956 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1400 Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Equipment Model(s)
 1. Ysi
 2. LaMotte
 3. MP-50
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1415	.2	6.08	17.53	47.2 47.2	-47.0	3.00	1.63	6958	
1425	.4	5.57	17.49	156	-39.6	2.24	.49	6958	
1435	.8	5.55	17.54	154	-36.8	1.67	.33	6958	
1445	1.2	5.54	17.52	153	-36.8	1.65	.00	6958	
1450	1.6	5.54	17.58	153	-36.7	1.70	.00	6958	

SAMPLE

Purge data continued on next sheet? Yes No

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-29R-Zone 3 Sample Date: 11-15-12 Sample Time: 1450 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

~70 PSI 1450 Sample

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW 29R Zone 4

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: MA
 Project Location: Anderson, SC Weather: 60 Sunny

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 6 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 177.206 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 529.1 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1455 Equipment Model(s):
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSL
2. LaMotte
3. MP-50
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1500	.2	5.54	17.63	.147	-25.1	2.38	.52	5296	
1505	.4	5.50	17.62	.147	-15.6	1.09	.41	5296	
1510	.6	5.50	17.62	.147	-10.8	1.05	.33	5296	
1515	.8	5.52	17.57	.147	-7.1	1.08	.21	5296	
1520	1.0	5.50	17.66	.147	-0.4	1.07	.00	5296	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-29R Zone 4 Sample Date: 11-15-12 Sample Time: 1520 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

1 of 1



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: NW-30

1. PROJECT INFORMATION

Project Number: _____ Task Number: 200702X Area of Concern: CC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: Sunny, 45°C

2. WELL DATA

Date Measured: 11-16-12 Time: 9:25 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 113 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 25.34 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 28.64 feet Well Volume: 14.64 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-16-12 Time: 9:40 Equipment Model(s):
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 14.64 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
9:40	0.5	6.22	19.52	.104	204	2.13	86.3	27.31	
9:45	2.0	6.40	19.42	.145	139	2.96	90.4	32.29	
9:50	3.0	6.42	19.49	.141	141	2.26	49.2	31.44	
9:55	4.0	6.34	19.56	.123	123	2.27	35.0	31.45	
10:00	5.0	6.29	19.58	.116	97	2.29	35.6	31.40	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 31.15 Field Filtered? Yes No
 Sample ID: NW-30 Sample Date: 11-16-12 Sample Time: 11:30 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

sample taken @ 11:30 on 11-16-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Juan Nunez
Signature

WELL ID: MW-30

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1005	6.00	6.28	19.58	.114	101	2.16	26.9	32.64	
1010 1005	7.00	6.28	19.57	.109	119	2.40	30.1	32.69	
1015	8.00	6.25	19.59	.109	107 123	2.44	43.7	31.29	
1020	9.00	6.24	19.60	.107	126	2.50	36.1	31.14	
1025	10.00	6.22	19.61	.103	129	2.55	26.0	31.01	
1030	11.00	6.22	19.62	.102	130	2.57	22.6	30.80	
1035	12.0	6.21	19.64	.102	130	2.56	20.7	31.2	
1040	13.0	6.21	19.68	.101	134	2.54	15.1	31.21	
1045	14.0	6.22	19.72	.100	136	2.62	15.4	31.09	
1050	15.0	6.21	19.77	.100	135	2.63	13.5	30.94	
1055	16.00	6.21	19.80	.099	135	2.61	12.1	30.80	
1100	17.00	6.21	19.82	.099	138	2.64	11.26	31.16	
1105	18.00	6.22	19.81	.099	140	2.62	11.68	31.18	
1110	19.00	6.21	19.83	.098	142	2.62	11.1	31.14	
1115	20.00	6.21	19.85	.098	144	2.64	9.54	31.21	
1120	21.00	6.21	19.89	.098	145	2.66	9.86	30.95	
1125	22.00	6.20	19.93	.097	145	2.69	7.87	31.37	

Purge data continued on next sheet?

Signature [Handwritten Signature]

WELL ID: MW-31

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell, Juan Nunez
 Project Location: Anderson, SC Weather: Sunny, 35°

2. WELL DATA

Date Measured: 11/12/12 Time: 0800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 90 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 26.45 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 63.55 feet Well Volume: 10.61 gal Screened Interval (from GS): 80-90
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/16/12 Time: 0800 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.221 gal/min Calibrated? Yes No

1. Heriba U-51
2. La Motte 2020
3. Solinst WL Meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ^{ns/cm} > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0800	0	6.06	17.45	0.072	255	8.63	957AU	28.61	
0805	1.5	6.16	18.34	0.072	245	2.18	634AU	29.19	
0810	4.0	6.16	18.51	0.073	241	1.49	122	29.16	
0815	5.0	6.13	18.76	0.073	236	0.78	99.6	29.30	
0820	6.5	6.11	18.69	0.073	233	0.77	84.6	29.51	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 29.34 Field Filtered? Yes No
 Sample ID: MW-31 Sample Date: 11/16/12 Sample Time: 910 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

WELL ID: MW-31

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ^{ms/cm} > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0825	7.5	6.11	18.81	0.073	232	0.79	40.9	29.34	
0830	8.5	6.10	19.03	0.073	228	0.88	19.6	29.35	
0835	10.0	6.10	19.12	0.073	226	0.95	16.1	29.33	
0840	11.0	6.11	19.21	0.073	224	0.90	13.9	29.35	
0845	12.5	6.10	19.34	0.073	221	1.05	13.3	29.31	
0850	14.0	6.10	19.41	0.073	220	1.14	10.02	29.32	
0855	14.5	6.11	19.53	0.073	218	1.26	8.84	29.33	
0900	15.0	6.11	19.59	0.073	218	1.25	7.37	29.32	
0905	15.5	6.11	19.61	0.073	218	1.17	7.07	29.34	

Purge data continued on next sheet?

Eileen Russell

WELL ID: MW-32

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 200-XXX Area of Concern: OC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: cloudy 60°F

2. WELL DATA

Date Measured: 11-14-12 Time: 1535 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 35 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 20.91 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 14.09 feet Well Volume: 2.35 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1535 1540 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 2.35 gallons
 Was well purged dry? Yes No Pumping Rate: 25 gal/min Calibrated? Yes No

1. VSI 556
2. LaMotte 2029
3. Hyran WLM
4. Geisib

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1540	.5	7.39	18.48	.501	73	4.60	123	20.95	
1545	1.5	6.30	22.48	.560	-113	4.87	155	23.00	
1550	2.5	6.34	22.34	.570	-114	4.77	104	22.31	
1555	4.0	6.40	22.05	.575	-119	4.47	150	21.92	
1600	6.5	6.47	21.85	.564	-126	3.51	147	21.50	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 21.61 Field Filtered? Yes No
 Sample ID: MW-32 Sample Date: 11-14-12 Sample Time: 1710 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

samples taken @ 1710 on 11-14-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: HG-32

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1605	7.0	6.53	21.78	.558	-131	2.48	160	21.41	
1610	7.5	6.61	21.87	.568	-139	1.59	95.5	21.48	
1615	8.5	6.60	21.90	.566	-138	1.23	42.1	21.51	
1620	9.5	6.59	21.93	.559	-138	.73	31.6	21.41	
1625	10.5	6.60	21.98	.562	-140	.48	16.1	21.63	
1630	12.0	6.60	21.97	.560	-140	.36	14.5	21.70	
1635	12.5	6.59	21.97	.553	-139	.12	12.37	21.62	
1640	13.5	6.57	21.99	.548	-139	0.00	10.25	21.60	
1645	14.5	6.57	22.01	.548	-139	0.00	10.00	21.60	
1650	15.5	6.56	22.03	.547	-138	0.00	9.79	21.65	
1655	16.5	6.56	22.01	.542	-138	0.00	11.40	21.5	
1700	17.00	6.55	22.09	.538	-139	0.00	9.40	21.59	
1705	17.50	6.55	22.06	.536	-139	0.00	7.74	21.60	
1710	18.00	6.56	22.05	.535	-139	0.00	7.29	21.60	

Purge data continued on next sheet?

Amber
Signature

WELL ID: MW-35

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: OC
 Client: Owens Corning Personnel: Juan Lopez
 Project Location: Anderson, South Carolina Weather: Rainy - 65°F

2. WELL DATA

Date Measured: 11-12-12 Time: 1400 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 162 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: artesian feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 13.42 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 138.58 feet Well Volume: 23.14 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1400 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 23.14 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. Lafayette 2020L turbidimeter
2. Horiba U-50
3. GeoSub
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1410	0.1	7.65	17.35	.665	-22	2.05	0.80	13.42	
1420	7.5	7.55	17.55	.641	-25	0.0	.56	13.47	
1425	10.5	7.55	17.55	.632	-130	0.0	.38	13.47	
1430	14.00	7.53	17.54	.627	-133	0.0	.30	13.52	
1435	16.5	7.47	17.54	.631	-129	0.0	.43	13.52	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 13.52 Field Filtered? Yes No
 Sample ID: MW-35 Sample Date: 11-12-12 Sample Time: 1444 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sr npt collected @ 1444 on 11-12-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-35

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1440	19.0	7.54	17.52	.631	-131	0.0	.45	13.57	

Purge data continued on next sheet?

Signature 

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 1-Waterloo

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: M
 Project Location: Anderson, South Carolina Weather: ~60 Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: Am Temporary Well: Yes No

Casing Diameter: 2 inches
 Screen Diameter: 6 inches
 Sampling Interval: 99.1-116 feet
 Depth to Static Water: 6383 Dg
 Depth to Product: _____ feet
 Length of Water Column: 93 feet
 Well Volume: 23 gal
 Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

Length of water column calculation:
 (8558.7-Current Dg reading)*0.01797*2.3108 = Length of water column (ft)
 Well Vol. calculation:
 1 well vol. = [vol sand interval(6") - vol of waterloo casing (2") + vol of tubing(1/4")
 = [24.83 gal - 2.82 gal] + (0.0102 gal/ft x length of water column)

3. PURGE DATA

Date Purged: 11-15-12 Time: 1235 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. LaMotte
3. MP50
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1240	.10	6.38	17.35	.109	-82.3	2.80	7.82	6387	
1250	.20	6.13	17.51	.111	-67.8	2.90	4.6	6386	
1300	.30	6.08	17.55	.110	-61.0	2.47	3.3	6387	
1310	.40	6.06	17.58	.110	-57.5	2.47	1.7	6387	
1320	.50	6.06	17.60	.110	-55.3	2.45	2.00	6387	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW36 Zone 1 Sample Date: 11-15-12 Sample Time: 1330 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

1330 sample

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-36 Zone 1-Waterloo

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		± 0.1 su	$\pm 2^\circ\text{C}$	> of $\pm 3\%$ or $\pm 10 \mu\text{S/cm}$	> of $\pm 10\%$ or ± 20 mV	> of $\pm 10\%$ or ± 0.2 mg/L	≤ 10 NTU		
1330	16	6.06	17.76	110	-50.8	2.45	0.00	6387	

Sample 1330 (PH, Cond, DO)

Purge data continued on next sheet?

Signature *MH*

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 3-Waterloo

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-XXX Area of Concern: _____
 Client: Owens Corning Personnel: M Ryan Jones
 Project Location: Anderson, South Carolina Weather: -50 Cloudy

2. WELL DATA

Date Measured: 11-10-12 Time: AM Temporary Well: Yes No

Casing Diameter: 2 inches
 Screen Diameter: 6 inches
 Sampling Interval: 180.2-192.7 feet
 Depth to Static Water: 6545 feet
 Depth to Product: _____ feet
 Length of Water Column: _____ feet
 Well Volume: _____ gal
 Screened Interval (from GS): 180.2-192.7
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

Length of water column calculation:
 (9093.1-Current Dg reading)*0.02725*2.3108 = Length of water column (ft)
 Well Vol. calculation:
 1 well vol. = [vol sand interval(6" - vol of waterloo casing (2")) + vol of water in tubing(1/4")
 = [18.36 gal - 2.09 gal] + (0.0102 x length of water column)

3. PURGE DATA

Date Purged: 11-15-12 Time: 1100 Equipment Model(s):

Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. Lamotte
3. MP-50
4. Geokon 42M

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1105	.1	7.34	15.81	1.352	-111.5	5.11	3.26	7452	93.21
1115	.15	7.20	15.32	1.378	-119.8	3.83	2.17	7633	91.93
1125	.20	7.14	14.21	1.380	-117.0	4.02	2.23	7511	8087
1135	.30	7.06	13.63	1.384	-119.6	2.89	1.17	8207	
1145	.35	7.04	13.26	1.387	-117.2	2.72	1.03	8261	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 8899.8 Field Filtered? Yes No
 Sample ID: MW-36 Zone 3 Sample Date: 11-16-12 Sample Time: 1335 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

low flow starting at 1125, not enough PSI
- purge restarted 11-16-12 by R. Jones

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

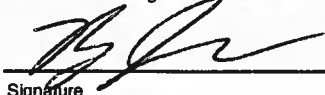
GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-36 Zone 3-Waterloo

3. PURGE DATA (continued from page 1)									
Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1155	.40	7.07	12.78	1.389	-108.4	3.08	1.78		
1200		Stop purged, need air compressor base							
1540		Resume Purge							
1545	.42	7.01	14.59	1.320	-8.3	6.04	5.31		
1555	.44	7.01	14.41	1.378	-13.0	4.31	3.89		
1605	.46	7.01	14.07	1.393	-127.7	5.75			
		Stop again, insufficient pressure							
11-6-12% Rest. - W				0930					
0950	0.1	7.35	14.18	1.329	-61.3	7.38	4.28	8116	
1000	0.15	7.35	15.61	1.362	-56.6	7.87	1.61	8393.2	
1015	0.25	7.34	16.98	1.375	-97.6	5.23	1.28	8648.6	
1030	0.3	7.34	16.85	1.388	-101.5	5.16	1.15	8886.3	
1045	0.35	7.34	17.12	1.389	-103.4	5.05	1.21	8949.6	Dry
SAMPLE @ 1335								8899.8	

Purge data continued on next sheet?


Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-36 Zone 5-Waterloo

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 45° Clear

2. WELL DATA

Date Measured: 11-12-12 Time: 4 AM Temporary Well: Yes No

Casing Diameter: 2 inches Length of water column calculation:
 Screen Diameter: 6 inches (8843.2-Current Dg reading)*0.03897)*2.3108) = Length of water column (ft)
 Sampling Interval: 269.9-275 feet Well Vol. calculation:
 Depth to Static Water: 6171.8 feet 1 well vol. = [vol sand interval(6" - vol of waterloo casing (2")) + vol of water in tubing(1/4")
 = [7.49 gal - 0.85 gal] + (0.0102 x length of water column)
 Depth to Product: _____ feet
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-16-12 Time: 1100 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Waterloo
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. Lamotte 2020
3. QED M150
4. Geo Kon WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1106	0.1	7.71	15.64	5.306	-118.6	6.35	48.61	6078.1	
1129	0.2	7.64	15.43	5.399	-223.2	6.61	26.5	8193.8	
1140	0.3	7.46	14.23	5.112	-238.7	7.28	10.38	8265.2	
1155	0.4	7.42	14.15	5.051	-216.7	7.51	6.38	8285.4	
1210	0.5	7.32	14.22	4.804	-227.6	7.58	3.92	8258.6	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 8246.8 Field Filtered? Yes No
 Sample ID: MW-36 Zone 5 Sample Date: 11-16-12 Sample Time: 1305 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET


**BROWN AND
CALDWELL**

WELL ID: MW-36 Zone 5-Waterloo

3. PURGE DATA (continued from page)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1225	0.55	7.29	16.78	4.790	-239.6	7.10	10.68	8272.1	flowcell in son
1235	0.16	7.28	17.11	4.602	-196.8	6.75	10.52	8281.6	
1245	0.65	7.27	18.66	4.571	-187.2	6.32	12.6	8254.8	
1255	0.7	7.27	18.54	4.562	-184.1	6.15	9.25	8255.2	
1300	0.75	7.26	18.63	4.554	-179.8	6.21	11.3	8246.8	
SAMPLE		1305							

Purge data continued on next sheet?


Signature

WELL ID: ~~MW-37 Zone 1~~ MW-37 Z1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: M
 Project Location: Anderson SC Weather: Cloudy ~60°F

2. WELL DATA

Date Measured: 11-12-12 Time: _____ Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 195 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 34.54 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 160.46 feet Well Volume: 6.57 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1400

Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. Camoffe
3. MP-50
4. Bladder

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1410	.1	7.14	13.92	.459	-123.5	8.31	7.08	31.80	
1420	.15	7.44	15.21	.887	-181.0	5.26	11.28	31.82	
1430	.20	7.56	15.66	.894	-190.9	3.72	7.93	31.82	
1440	.25	7.58	15.70	.894	-207	2.12	6.11	40.45	
1450	.30	7.59	15.77	.894	-214.2	.91	4.64	40.48	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-37 Zone 1 Sample Date: 11-14-12 Sample Time: 1520 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Black particles in tubing, put pump around ~100 ft, historically well has extensive drawdown

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

[Signature]



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Z1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1500	.35	7.58	15.64	.894	-217.9	.52	3.18	41.72	
1510	.40	7.58	15.63	.894	-223.8	.30	2.79	48.87	
1520	.45	7.58	15.63	.894	-223.0	.31	1.78	48.87	
Sample 1520									

Purge data continued on next sheet?

WELL ID: MW-37 Zone 2

1. PROJECT INFORMATION
 Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Arcom Corning Personnel: MJ
 Project Location: Anderson SC Weather: 40° cloudy

2. WELL DATA Date Measured: 8-12-12 Time: Am Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 232 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 33.4 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 98.56 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA Date Purged: 11-15-12 Time: 0835 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0835	.05	6.86	9.95	.228	-137.1	9.46	15.51	36.82	
0845	.1	8.33	9.89	.162	-164.3	7.51	13.14	36.82	
0855	.15	9.21	10.48	.156	-176.2	7.61	11.04	36.82	
0905	.20	9.37	10.64	.156	-174.6	7.78	11.78	37.17	
0915	.25	9.58	10.50	.159	-174.4	7.99	10.11	37.17	

Purge data continued on next sheet?

4. SAMPLING DATA Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-37 Zone 2 Sample Date: 11-15-12 Sample Time: 1035 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS attempted purge 11-14, pumped about ~2 gal, pump wasn't deep enough and drawdown exceeded intake

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-37 Zone 2

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0925	.30	9.76	10.32	.163	-174.1	803	7.00	37.17	
0935	.35	9.98	10.21	.170	-173.1	7.96	6.76	37.17	
0945	.40	10.15	10.23	.176	-173.8	7.70	5.68	38.94	
0955	.45	10.28	9.98	.184	-172.5	7.62	3.71	38.94	
1005	.50	10.50	10.30	.205	-170	7.17	3.14	39.19	
1015	.60	10.73	10.53	.234	-164.3	6.89	2.17	39.19	
1025	.65	10.83	10.72	.248	-170	6.51	1.49	41.34	
1035	.70	10.84	10.85	.255	-168.3	6.45	1.33	41.34	
<p>Sample B35 due to time</p>									

Purge data continued on next sheet?

[Handwritten Signature]
Signature

WELL ID: MW-37 Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.001 Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 272 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 34.54 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 237.46 feet Well Volume: 9.74 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1529 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): stability well volumes or 2-h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MP50 - bladder
2. VSI 556
3. LeMott 2020
4. Heron WLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1615	0.1	7.05	18.95	0.495	-66.5	8.01	15.6	35.62	
1625	0.25	7.40	19.48	0.491	-57.5	8.48	1.24	38.68	
1635	0.3	7.53	18.27	0.489	-46.8	8.15	1.56	39.31	
1645	0.4	7.55	18.16	0.485	-29.2	8.29	1.05	39.68	
1655	0.5	7.57	18.05	0.482	-28.5	8.24	0.00	40.22	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 43.44 Field Filtered? Yes No
 Sample ID: MW-37 2013 Sample Date: 11-12-12 Sample Time: 1820 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake @ 81 ft - Difficultly getting started
4 CPM @ 10/5

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-37 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1705 1705	0.55	7.63	17.84	0.479	-9	8.01	0.0	40.68	
1715	0.6	7.65	17.80	0.476	-12.5	7.58	0.0	41.51	
1725	0.65	7.51	17.61	0.471	-20.6	7.01	0.0	41.78	
1735	0.70	7.41	17.42	0.452	-28	6.32	0.0	42.28	
1745	0.75	7.22	17.22	0.439	-32	5.21	0.0	42.92	
1755	0.80	7.10	17.11	0.428	-39	4.79	0.0	43.11	
1805	0.85	7.06	16.95	0.422	-44	4.65	0.0	43.26	
1815	0.90	7.05	17.01	0.421	-46	4.61	0.0	43.44	
1820	SAMPLE								

Purge data continued on next sheet?

Signature [Handwritten Signature]

WELL ID: MW-38 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 52° Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 430 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 8.73 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 421.27 feet Well Volume: 17.27 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1420 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Volume to Purge (minimum): Stability well volumes or 2-h gallons

Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1445	0.01	7.26	14.50	0.319	-216	7.58	26.2	7.45	Flow cell fixed
1500	0.1	7.53	16.28	0.322	-221	6.96	17.20	11.24	
1515	0.2	7.43	16.33	0.320	-231	3.35	4.63	16.12	unable to maintain water level
1530	0.45	7.42	16.45	0.319	-232	2.89	1.41	19.19	
1545	0.55	7.42	16.55	0.317	-234	4.42	1.09	23.44	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____

Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable

Depth to Water at Time of Sampling: 25.94 27.67 Field Filtered? Yes No

Sample ID: MW-38 Zone 1 Sample Date: 11-14-12 Sample Time: 1620 # of Containers: 2

Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____

Equipment Blank Collected? Yes No ID: EB-111412 # of Containers: 2

Geochemical Analyses

Ferrous Iron: _____ mg/L

DO: _____ mg/L

Nitrate: _____ mg/L

Sulfate: _____ mg/L

Alkalinity: _____ mg/L

5. COMMENTS

Intake @ 90' - some trouble starting, pull rope & replace grab plate
3 CPM 14/6
Det. Equipment blank

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 1

3. PURGE DATA (continued from page 1)

Table with 9 columns: Time, Cum. Gallons Removed (gal), pH, Temp, Spec. Cond., ORP, DO, Turbidity, Water Level, Comments. Handwritten data for samples 1609, 1615, and 1620.

Purge data continued on next sheet? []

Signature [Handwritten Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-38 Zone 2

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 56° Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 499.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: Artesian 0.01 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 499.6 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1640 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Artesian
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): stability well volumes or 2h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. LoMotte 202
3. _____
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1645	0.01	7.76	15.31	0.178	-186	0.31	1.46	—	
1700	0.75	7.85	17.07	0.178	-196	0.26	0.0	—	
1710	1.25	7.89	17.20	0.178	-203	0.09	0.0	—	
1715	1.5	7.90	17.11	0.178	-200	0.08	0.0	—	
1725	2.25	7.92	16.97	0.178	-204	0.11	0.0	—	

SAMPLE 1727

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: Artesian
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-38 Zone 2 Sample Date: 11-14-12 Sample Time: 1727 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Artesian flow

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Lynn James
 Project Location: Anderson, South Carolina Weather: 60°F Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: 4M Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 105 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 23.12 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 81.86 feet Well Volume: 3.3 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 0900 Equipment Model(s) _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): 5 + 6:1.4 or 2-hr well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. VSI 556
2. Lamotte 2020
3. MP50 bladder pump
4. Heron WCM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1020	0.0	6.79	16.59	0.181	-54.8	9.07	1.61	23.19	water flowing
1035	0.1	6.82	16.97	0.097	63.1	8.04	1.22	23.21	
1050	0.15	6.79	17.31	0.086	-30.6	3.61	1.15	23.51	
1105	0.2	6.76	18.25	0.083	-21.1	1.54	1.01	23.55	
1120	0.25	6.76	17.62	0.083	26.6	1.30	0.0	23.60	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: ubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-39 Zone 1 Sample Date: 11-13-12 Sample Time: 1225 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Not pumping. Take pump apart & replace o-rings
13/7 3CPM 150 PSI - Depth set @ 85'

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-39 Zone 1

3. PURGE DATA (continued from page ___)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1135	0.4	6.78	17.79	0.083	63.7	1.88	0.0	23.71	
1205	0.5	6.80	18.22	0.084	79.6	2.39	0.0	24.94	tubing in SW
1220	0.55								
1225	Sampled								

Purge data continued on next sheet?

[Handwritten Signature]
Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 2

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Lynn Jones
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: 11-13-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 215 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 3831 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 176.69 feet Well Volume: 7.24 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 1415 Equipment Model(s) _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Pipe/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): Stability well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. MPSO bladder pump
2. VSI 556
3. Heron WLM
4. LaMotte 2020

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1425</u>	<u>0.01</u>	<u>7.01</u>	<u>19.62</u>	<u>0.169</u>	<u>-77.5</u>	<u>10.92</u>	<u>16.2</u>	<u>36.65</u>	<u>Flow cell filled</u>
<u>1435</u>	<u>0.15</u>	<u>7.40</u>	<u>18.94</u>	<u>0.560</u>	<u>-133.3</u>	<u>5.51</u>	<u>9.61</u>	<u>39.41</u>	
<u>1445</u>	<u>0.2</u>	<u>7.56</u>	<u>18.91</u>	<u>0.588</u>	<u>-122.4</u>	<u>5.85</u>	<u>2.47</u>	<u>41.89</u>	
<u>1455</u>	<u>0.25</u>	<u>7.61</u>	<u>18.90</u>	<u>0.588</u>	<u>-111</u>	<u>6.24</u>	<u>1.52</u>	<u>43.25</u>	
<u>1505</u>	<u>0.3</u>	<u>7.67</u>	<u>18.87</u>	<u>0.588</u>	<u>-91.5</u>	<u>8.17</u>	<u>1.11</u>	<u>45.39</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Pipe Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW39 Zone 2 Sample Date: 11-13-12 Sample Time: 1532 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set @ 90' 3 cpm 12.5/7.5

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.


GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-39 Zone 2

3. PURGE DATA (continued from page <u> 1 </u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1515	0.4	7.68	18.46	0.587	-84	9.39	0.0	47.61	
1525	0.5	7.71	17.95	0.588	-77.8	10.10	0.0	51.30	tubing in shadow
1535	0.6	7.70	17.93	0.588	-76.1	9.93	0.0	53.11	
1532	SAMPLE								

Purge data continued on next sheet?



 Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Dams
 Project Location: Anderson, South Carolina Weather: 65 Sunny

2. WELL DATA

Date Measured: 11-12-12 Time: 4:00 Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 300 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 50.47 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 249.53 feet Well Volume: 10.23 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 12:35 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. Heron WLM
2. MP50 bladder pump
3. Lumette 2020
4. YSI 556

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1250	0.01	6.83	18.63	0.161	-121.7	7.62	15.6	53.70	Flow cell filled
1305	0.1	6.87	18.58	0.160	-137	10.14	2.61	56.00	
1315	0.2	6.89	18.58	0.159	-141.4	10.12	1.34	56.51	
1325	0.3	6.89	18.62	0.159	-107.4	10.15	1.05	59.25	
1335	0.35	6.89	18.61	0.158	-103.6	10.16	1.14	60.12	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 63.14 Field Filtered? Yes No
 Sample ID: MW-39 Zone 3 Sample Date: 11-13-12 Sample Time: 1400 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake @ 90' start 4CPM - slowed to 3CPM 12/8 175psi

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-39 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1345	0.45	6.89	18.51	0.159	-104	9.89	0.0	62.15	
1355	0.5	6.89	18.53	0.159	-103.1	9.75	0.0	63.14	
1400	SAMPLE								

Purge data continued on next sheet?

Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 50° Clear

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 129 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 7.25 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 121.75 feet Well Volume: 4.99 gal Screened Interval (from GS): 17-32
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1350 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): stability well volumes or 2-h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. VSI 556
2. QED MP50
3. Heron WLM
4. Lotte 2020

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1350 1350	0.01	7.75	15.22	0.242	-43.9	8.20	26.5	7.25	Flow cell filled
1410	0.1	7.67	15.33	0.231	-36.3	0.95	3.42	7.29	
1420	0.2	7.69	15.39	0.230	-34.8	0.67	0.60	7.25	
1430	0.25	7.67	15.43	0.230	-31.5	0.63	0.55	7.28	
1440	0.35	7.71	16.06	0.229	-30.8	0.62	0.0	7.31	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 7.24 Field Filtered? Yes No
 Sample ID: MW-41 Zone 1 Sample Date: 11-15-12 Sample Time: 1505 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set @ 25' 300M 1515

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Handwritten Signature]

WELL ID: MW-41 Zone 1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1459	9.5	7.69	16.11	0.228	-28.1	0.60	0.0	7.25	
1500	9.6	7.68	16.18	0.228	-25.6	0.59	0.0	7.24	
1505	SAMPLE								

Purge data continued on next sheet?


Signature _____

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-41 Zone 2

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 50° Sunny

2. WELL DATA

Date Measured: 11-12-14 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 129 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 5.90 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 123.1 feet Well Volume: 5.04 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1525 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): Stability well-volumes or 2-h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. QED MP50
3. Heion WLM
4. LaMotte 2020

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1340	0.01	7.55	13.46	0.264	-155.2	7.71	12.18	6.60	flow cell filled
1355	0.1	7.80	13.67	0.262	-128	7.98	10.3	6.64	
1410	0.2	7.82	12.98	0.261	-111	8.56	4.27	6.63	
1425	0.3	7.85	12.54	0.259	-101	8.76	1.77	6.81	
1440	0.4	7.86	12.45	0.259	-100	8.72	0.0	7.01	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-41 Zone 2 Sample Date: 11-15-12 Sample Time: 1530 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: EB-111512 # of Containers: 2

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set @ 90'
EB-111512 @ 1200
Time incorrect → should be 1730

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

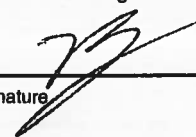
GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-41 Zone 1

3. PURGE DATA (continued from page <u> </u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1655	0.5	7.87	12.56	0.258	-105	8.61	1.61	7.11	
1810	0.6	7.87	12.48	0.258	-103	8.43	0.5	7.20	
1925	0.7	7.88	12.61	0.259	-99	8.51	0.0	7.29	
SAMPLE		1530							

Purge data continued on next sheet?

Signature 

WELL ID: MW-41 Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Lyn Jones
 Project Location: Anderson, South Carolina Weather: 50° Cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 299 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 8.94 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 290.06 feet Well Volume: 11.89 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-15-12 Time: 1130 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): stability well volumes or 24 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. LeMatte 2020
3. RED MP50
4. Here WLM

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1138	0.1	7.78	15.28	0.363	-107.7	2.11	23.6	9.01	flow cell full
1150	0.2	7.89	15.01	0.369	-136.5	1.04	9.26	12.79	
1200	0.35	7.86	14.71	0.369	-147.2	1.63	3.83	14.51	
1210	0.45	7.82	14.90	0.366	-158.4	0.49	1.68	17.61	
1220	0.5	7.79	14.98	0.365	-163.2	0.44	0.96	20.25	Δ to 16/4 cycle

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 31.62 Field Filtered? Yes No
 Sample ID: MW-41 Zone 3 Sample Date: 11-15-12 Sample Time: 1315 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Inlet set @ 90' 3 CPM 14/6

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

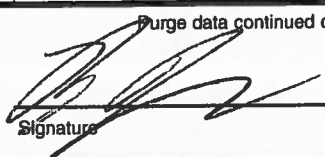
GROUNDWATER SAMPLING FIELD DATA SHEET

BROWN AND CALDWELL

WELL ID: MW-41 Zone 3

3. PURGE DATA (continued from page <u>1</u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1235	0.6	7.73	15.00	0.363	-172.8	2.81	0.0	23.51	
1247	0.7	7.66	15.10	0.362	-177.1	1.17	0.0	26.71	
1300	0.8	7.64	14.93	0.362	-178	1.89	0.0	29.13	
1310	0.9	7.65	15.03	0.362	-179	1.26	0.0	31.62	
1315	SAMPLE								

Purge data continued on next sheet?


Signature

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-42 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 50° Sunny

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 129 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 43.21 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 85.71 feet Well Volume: 3.52 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1045 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): stability well volumes or 2-h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. Lamotte 2020
3. MP50 bladder pump
4. Herco VLM

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1055	0.01	9.49	16.97	0.156	-92.5	4.55	24.6	43.35	Flow cell full
1110	0.25	9.73	17.38	0.152	-104	0.62	3.6	43.45	
1125	0.4	9.75	17.33	0.152	-109	0.45	0.61	43.71	
1140	0.55	9.76	17.06	0.152	-113	0.40	0.0	44.09	
1155	0.75	9.78	17.42	0.152	-113	0.38	0.9	44.21	

SAMPLE G 1200

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW 42 Zone 1 Sample Date: 11-14-12 Sample Time: 1200 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set G 90' 4 CPM 10/5

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

[Signature]
 Signature

WELL ID: MW-42 Zone 2

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 45° clear

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 222 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 40.39 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 181.61 feet Well Volume: 7.44 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 0835 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): Stability well volumes or 2-4 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YS1556
2. LaMotte 2020
3. Heiss WLM
4. MP50 bladder pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0845	0.01	7.41	13.15	0.710	-165	3.74	6.28	41.84	Flow cell full
0900	0.1	7.49	13.59	0.672	-207	1.28	4.69	44.20	
0929	0.2	7.41	15.32	0.664	-246	0.58	1.21	47.15	
0935	0.35	7.36	15.33	0.667	-262	0.42	1.17	51.60	
0950	0.5	7.36	16.13	0.665	-269	0.33	1.02	56.11	flow cell in sun

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 59.82 Field Filtered? Yes No
 Sample ID: MW-42 Zone 2 Sample Date: 11-14-12 Sample Time: 1010 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set @ 90'
3 CPM 16/4

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Signature]


GROUNDWATER SAMPLING FIELD DATA SHEET



WELL ID: MW-42 Zone 2

3. PURGE DATA (continued from page <u>1</u>)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1025 1010	0.7	7.34	16.32	0.667	-271	0.31	0.0	59.82	
	SAMPLE								

Purge data continued on next sheet?


Signature

WELL ID: MW-42 Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200-xxx Area of Concern: _____
 Client: Owens Corning Personnel: Ryan Jones
 Project Location: Anderson, South Carolina Weather: 50° Sunny

2. WELL DATA

Date Measured: 11-12-12 Time: AM Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 285 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 40.65 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 244.35 feet Well Volume: 10.02 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1220 Equipment Model(s)

Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): 5 to 6 ill. well volumes or 2h gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. Lanette 2020
3. Heron WLM
4. RED MP50

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1230	0.01	7.22	18.71	0.263	-184	3.07	16.8	41.2	Flow cell filled
1240	0.01 0.01	7.20	18.45	0.252	-224	0.81	12.7	43.75	flow cell in suq
1255	0.12	7.24	18.69	0.251	-241	0.50	6.37	46.59	
1310	0.3	7.21	18.41	0.251	-247	0.41	1.70	48.76	
1325	0.45	7.24	18.76	0.251	-253	0.35	1.14	51.12	

SAMPLES 1330

Purge data continued on next sheet?

4. SAMPLING DATA

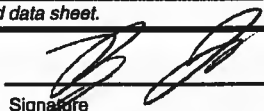
Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 51.12 Field Filtered? Yes No
 Sample ID: MW-42 Zone 3 Sample Date: 11-14-12 Sample Time: 1330 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Intake set @ 90'

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: 

WELL ID: MW-43 Zone 1

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Quens Corning Personnel: MJ
 Project Location: Anderson SC Weather: ~70 sunny

2. WELL DATA

Date Measured: 8-12 Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 114 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 8.00 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 106 feet Well Volume: 4.81 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 1505 Equipment Model(s)
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 4.31 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. Ysi
2. Lamotte
3. MP-50
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1510	.1	6.06	16.33	.108	-121.4	8.80	12.16	8.00	/
1520	.2	6.29	16.36	.096	-136.2	3.86	19.77	8.00	
1530	.25	6.48	16.24	.095	-128.4	3.33	32.78	8.00	
1540	.30	6.51	16.17	.096	-120.0	3.32	35.33	8.00	
1550	.35	6.71	16.36	.096	-116.0	2.92	40.22	8.00	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-43 Sample Date: 11-13-12 Sample Time: 1710 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

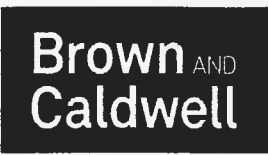
Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Water is cloudy, sun is se
on Ysi is dropping

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature: [Handwritten Signature]



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Z1

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1600	.40	6.57	16.09	.096	-163.3	3.35	40.62	8.00	
1610	.45	6.48	15.58	.095	-90.3	2.81	43.11	8.00	
1620	.50	6.47	15.42	.095	-87.3	2.45	42.23	8.00	
1630	.55	6.52	15.25	.095	-85.5	2.22	40.13	8.00	
1640	.60	6.55	15.08	.096	-84.3	2.16	39.23	8.00	
1650	.65	6.61	15.10	.096	-84.3	2.08	41.09	8.00	
1700	.7	6.59	15.08	.096	-80.5	2.05	33.96	8.00	
1710	.75	6.59	14.94	.096	-78.8	2.05	31.71	8.00	
Sample at 1710 (Time)									

Purge data continued on next sheet?

WELL ID: 76-43 Zone 2

1. PROJECT INFORMATION

Project Number: 42376 Task Number: 200 Area of Concern: _____
 Client: Quess Coraing Personnel: Ryan Jones
 Project Location: Anderson, SC Weather: 50°

2. WELL DATA

Date Measured: 11-12-12 Time: 3:40 PM Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 182.62 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 5.52 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 177.1 feet Well Volume: 7.26 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-12 Time: 1420 Equipment Model(s)
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): 5.26 well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. VSI 556
2. Hycon WLM
3. LoMatte 2020
4. MPSO Bladder Pump

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1645	0.01	7.00	12.51	0.232	-153.7	5.96	15.6	5.49	Flow cell filled
1655	0.2	7.22	16.26	0.228	-186.8	4.34	9.61	6.41	
1705	0.3	7.22	16.40	0.228	-208	2.58	2.13	6.54	
1715	0.45	7.22	16.35	0.227	-211	1.69	1.56	6.31	
1725	0.6	7.23	16.35	0.227	-225	0.96	1.24	6.35	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 6.42 Field Filtered? Yes No
 Sample ID: MW43 Zone 2 Sample Date: 11-13-12 Sample Time: 1240 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

4CPM 10/5 Intake get @ 90'

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: MW-43 Zone 3

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: MJ
 Project Location: Anderson, SC Weather: ~60 cloudy

2. WELL DATA

Date Measured: 11-12-12 Time: _____ Temporary Well: Yes No
 Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 284.89 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 19.11 23.11 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 261.4 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-13-1 Time: 0920 Equipment Model(s)
 Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 10.71 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. Lamotte
3. MP-50
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0925	.3	7.19	15.49	.314	-16.0	5.16	3.41	19.11	
0935	.65	7.58	15.53	.316	-46.6	4.17	3.09	25.50	
0945	.8								MP-50 Mal function
1235	.85	7.58	7.89	.320	-54.4	5.78	2.77	29.11	
1245	.90	7.59	17.48	.320	-78.2	3.36	2.13	29.11	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: MW-43 Zone 3 Sample Date: 11-13-12 Sample Time: 1405 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

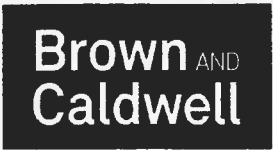
Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

3 CPM, slowed to prevent drawdown at 0935
stopped pumping, MP-50 issue, air will bring a new one

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature M. K. H.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43 Zone 3

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1255	1.10	7.63	17.22	.320	-101.5	2.18	3.30	29.11	
1305	1.15	7.69	17.31	.318	-135.6	1.24	2.17	29.11	
1315	1.20	7.68	17.25	.318	-149.6	.70	1.98	30.12	
1325	1.25	7.70	17.28	.318	-161.3	.37	1.16	33.12	
1335	1.30	7.69	17.37	.318	-166.3	.51	.98	35.45	
1345	1.35	7.70	17.35	.318	-172.5	.28	1.17	36.99	
1355	1.40	7.70	17.42	.318	-179.3	.29	2.01	38.37	
1405	1.45	7.69	17.40	.318	-178.9	.25	1.97	39.77	
		Sample 1405							
		11/13/12							

Purge data continued on next sheet?

Signature

WELL ID: TW-40

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 47°

2. WELL DATA

Date Measured: 11/12/12 Time: 800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 74 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 22.1 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 51.9 feet Well Volume: 8.667 gal Screened Interval (from GS): 64-74
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/14/12 Time: 1220 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.114 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst WL meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. ms/cm > of ±8% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1220	0	12.56	16.26	4.59	-85	5.16	10.60	22.92	
1230	1.25	12.76	15.80	4.60	-83	3.85	6.70	26.73	
1240	3.0	12.78	16.17	4.61	-79	2.76	4.60	30.53	
1250	4.0	12.79	16.12	4.60	-74	3.96	3.86	32.68	
Collected Sample						EMP 11/14/12			

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 32.68 Field Filtered? Yes No
 Sample ID: TW-40 Sample Date: 11/14/12 Sample Time: 1255 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: — # of Containers: —

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell
 Signature

WELL ID: TW-41

1. PROJECT INFORMATION

Project Number: 140437 Task Number: 200-1014 Area of Concern: OC
 Client: Owens Corning Personnel: Juan Nunez
 Project Location: Anderson, SC Weather: 85°F

2. WELL DATA

Date Measured: 11-14-12 Time: 1345 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 55.3 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: 18.65 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 36.65 feet Well Volume: 6.12 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14-12 Time: 1355 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or 6.12 gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 556
2. Geo Sub
3. Heron WLM
4. Cam Hi 2029

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1355	1.5	6.60	18.74	.215	203	4.42	93.2	17.61	
1400	2.1	7.75	18.45	.444	212	3.03	38.8	24.41	
1405	2.5	7.96	18.51	.445	194	2.59	39.8	27.01	
1410	3.02	7.92	18.51	.444	185	2.56	34.0	30.59	
1415	2.5	7.91	18.65	.446	177	2.63	24.0	34.4	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 48.05 Field Filtered? Yes No
 Sample ID: TW-41 Sample Date: 11-14-12 Sample Time: 1438 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Sample taken @ 1438 on 11-14-12

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Juan Nunez
 Signature

WELL ID: PW-41

3. PURGE DATA (continued from page 1)

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1420	3.0	7.87	18.85	.446	158	2.80	11.46	38.51	
1425	3.5	7.87	18.91	.446	151	2.84	8.60	41.51	
1430	4.0	7.85	19.05	.447	139	2.95	7.71	44.51 → 44.51	
1435	4.5	7.85	18.55	.446	141	2.92	7.00	47.09	

Purge data continued on next sheet?

Signature *[Signature]*
 Page 2 of 2

WELL ID: ~~TW-43~~ TW-42

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: MA
 Project Location: Anderson SC Weather: Sunny ~68°F

2. WELL DATA

Date Measured: 11-13 Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 26 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 17.75 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 8.25 feet Well Volume: 133 gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14 Time: 0835 Equipment Model(s)

Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): 2 well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. LaMotte
3. MP-50
4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0830	.1	5.01	11.98	.099	73.6	7.11	122	17.73	brown water
0840	.15	5.10	12.94	.052	70.4	6.65	111	17.73	
0850	.20	5.16	13.29	.045	70.0	6.79	99	17.73	
0900	.25	5.16	13.59	.041	71.2	6.82	78	17.73	
0910	.30	5.16	14.28	.041	73.4	6.56	35	17.73	

Purge data continued on next sheet?

4. SAMPLING DATA

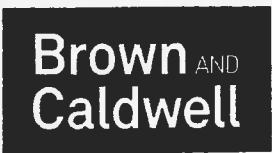
Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: TW-42 Sample Date: 11-14 Sample Time: 0930 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: TW-42

3. PURGE DATA (continued from page 1)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
0920	.35	5.13	14.13	.041	75.9	6.20	23	17.75	
0930	.40	5.13	14.58	.041	77.9	6.01	19	17.75	
0940	.45	5.14	14.96	.041	81.6	5.95	9.08	17.75	
0950	.50	5.12	15.12	.041	86.4	5.98	4.35	17.75	
<p>Sample 0950 pH, Cond, DO</p>									

Purge data continued on next sheet?

WELL ID: TW-43

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: MA
 Project Location: Anderson SC Weather: Sunny ~65°F

2. WELL DATA

Date Measured: 11-12 Time: 4M Temporary Well: Yes No

Casing Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 1 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 18.6 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 17.75 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 0.85 feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14 Time: 1100 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
 2. LaMotte
 3. MP-50
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1105	.05	5.25	17.40	.051	79.9	7.32	141	17.88	
1110	.08	5.20	17.51	.049	82.3	7.08	93	17.88	
1125	.10	5.07	17.44	.047	93.7	6.58	71	17.88	
1135	.15	5.00	17.00	.045	108.0	6.78	53	17.88	
1145	.20	5.00	17.06	.044	117.1	6.92	38	17.88	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: TW-43 Sample Date: 11-14 Sample Time: 1225 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: Dup11412 # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

1225 sample, Dup
 Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: MW-43

3. PURGE DATA (continued from page 1)									
Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
1155	.25	5.08	17.47	.045	117.3	6.73	30		
1205	.30	5.06	17.75	.044	126	6.69	23		
1215	.35	5.03	17.88	.044	129.6	6.47	23		
1225	.40	5.06	18.05	.044	129.6	6.51	21		
Sample 1215									

Purge data continued on next sheet?

WELL ID: TW-44

1. PROJECT INFORMATION

Project Number: 42376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 40°

2. WELL DATA

Date Measured: 11/12/11 Time: 800 Temporary Well: Yes No

Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 74 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 14.31 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 59.69 feet Well Volume: 9.97 gal Screened Interval (from GS): 64-74
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/14/12 Time: 1000 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.146 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst ML Meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. <u>mg/cm</u> > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1000	0	6.20	16.30	0.073	295	12.72	-37	16.95	
1010	2.0	6.44	16.73	0.074	274	9.57	883AU	16.82	
1020	4.0	6.50	16.82	0.074	269	8.85	647AU	16.90	
1030	5.5	6.51	16.89	0.074	278	8.32	667AU	16.84	
1040	7.0	6.50	16.71	0.074	285	8.02	-27	15.83	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 15.89 Field Filtered? Yes No
 Sample ID: TW-44 Sample Date: 11/14/12 Sample Time: 1115 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

WELL ID: TW-46

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: Sunny, 52°

2. WELL DATA

Date Measured: 11/12/12 Time: 800 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 88.3 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 26.43 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: — feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 61.87 feet Well Volume: 10.33 gal Screened Interval (from GS): 83.3-88.3
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/14/12 Time: 1420 Equipment Model(s)
 Purge Method: Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.078 gal/min Calibrated? Yes No

1. Horiba U-51
2. La Motte 2020
3. Solinst ML Meter
4. GeoTech pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. <u>ns/cm</u> > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1420	0	12.11	19.03	1.53	-54	2.60	66.4	24.59	
1430	1.0	12.12	19.77	1.69	-93	0.00	32.5	32.05	
1440	1.5	12.10	19.85	1.66	-97	0.00	28.7	34.95	
1450	2.25	12.05	20.17	1.53	-99	0.00	7.72	38.19	
1500	3.0	12.00	20.21	1.42	-103	0.00	9.03	42.07	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailor, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailor Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 60.05 Field Filtered? Yes No
 Sample ID: TW-46 Sample Date: 11/14/12 Sample Time: 1625 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: — # of Containers: —
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

Signature

WELL ID: Alloy

1. PROJECT INFORMATION

Project Number: 14276 Task Number: 209 Area of Concern: _____
 Client: Owens Corning Personnel: Eileen Russell
 Project Location: Anderson, SC Weather: 46°, cloudy, some rain

2. WELL DATA

Date Measured: 11/12/12 Time: 8:00 Temporary Well: Yes No
 Casing Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: 2 inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: 61 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: 13.03 feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: N/A feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: 43.97 feet Well Volume: 7.343 gal Screened Interval (from GS): 56-61
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11/12/12 Time: 1350 Equipment Model(s)
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: 0.19 gal/min Calibrated? Yes No

1. Horiba U-5000
2. LaMotte 2020
3. Solinst WL Meter
4. Geoprobe pump

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. (µS/cm) > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
1350	0	6.03	19.55	0.103	99	3.53	37.6	19.56	
1400	4.0	6.06	19.38	0.098	149	3.19	26.4	20.61	
1410	6.0	6.01	19.39	0.096	165	2.95	21.7	19.04	
1420	8.5	6.10	19.43	0.096	172	2.62	11.9	18.57	
1430	10.0	6.03	19.54	0.096	175	2.63	11.07	18.41	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: 18.50 Field Filtered? Yes No
 Sample ID: Alloy Sample Date: 11/12/12 Sample Time: 1455 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Eileen Russell

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 628 Airline Road

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1655 Equipment Model(s) _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1655</u>	<u>5</u>	<u>6.01</u>	<u>17.19</u>	<u>2063</u>	<u>159.4</u>	<u>4.45</u>	<u>.41</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 628 Bailer Partial Sample Date: 11-12-12 Sample Time: 1700 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

T-fitting while sampling

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 408 Clinkscales Road



1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-10 Time: 1447 Equipment Model(s): _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
 2. LAMORTE DRT
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1450</u>	<u>5</u>	<u>5.07</u>	<u>17.62</u>	<u>0.054</u>	<u>134.6</u>	<u>7.30</u>	<u>2.17</u>	—	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 408 Clinkscales Sample Date: 11-12-10 Sample Time: 1450 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 605 Clinkscales Road

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1500 Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
2. DRT
3. _____
4. _____

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>1500</u>	<u>5</u>	<u>4.66</u>	<u>17.62</u>	<u>0.019</u>	<u>219.0</u>	<u>6.81</u>	<u>1.8</u>	<u>—</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 605 Clinkscales Rd Sample Date: 11-12-12 Sample Time: 1505 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature M

WELL ID: 721 Clinkscales Road

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: _____
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1515 Equipment Model(s): _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1515</u>	<u>5</u>	<u>5.08</u>	<u>17.83</u>	<u>.062</u>	<u>213.4</u>	<u>6.72</u>	<u>.40</u>	—	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 721 Clinkscales Sample Date: 11-12-12 Sample Time: 1520 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

WELL ID: 1303 Clinkscates Road

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, B^s
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1545 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
 2. DRT
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>12:1545</u>	<u>5</u>	<u>5.50</u>	<u>16.82</u>	<u>.042</u>	<u>132.3</u>	<u>7.23</u>	<u>.31</u>	<u>-</u>	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 1303 Clinkscates Sample Date: 11-12-12 Sample Time: 1550 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 119 Cloverhill Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1555 Equipment Model(s) _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1555</u>	<u>5</u>	<u>5.07</u>	<u>16.56</u>	<u>0.047</u>	<u>190.0</u>	<u>6.28</u>	<u>11</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 119 (Cloverhill) Sample Date: 11-12 Sample Time: 1600 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: Dup-111212 # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: 335 Elrod Rd
115

1. PROJECT INFORMATION

Project Number: _____ Task Number: _____ Area of Concern: _____
 Client: _____ Personnel: M
 Project Location: _____ Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____

Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.653 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-14 Time: _____ Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI 1
 2. 1
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH	Temp	Spec. Cond.	ORP	DO	Turbidity	Water Level	Comments
		±0.1 su	±2°C	> of ±3% or ±10 µS/cm	> of ±10% or ±20 mV	> of ±10% or ±0.2 mg/L	≤ 10 NTU		
<u>Well out of service</u>									

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: _____ Sample Date: _____ Sample Time: _____ # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: 335 Elrod Road

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: MB BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1535 Equipment Model(s) _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1535</u>	<u>5</u>								
		<u>Not sampled Pump not working</u>							

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 335 Elrod Sample Date: 11-12-12 Sample Time: 1544 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 117 Faye Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: MA, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.460 gal/ft

3. PURGE DATA

Date Purged: 11-12 Time: 1645 Equipment Model(s): _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1645</u>	<u>5</u>	<u>6.85</u>	<u>17.64</u>	<u>232</u>	<u>156.5</u>	<u>5.62</u>	<u>.15</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 117 Faye Drive Sample Date: 11-12-11 Sample Time: 1650 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: 200 Friendship Lane

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: BS, W
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1525 Equipment Model(s) _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1525</u>	<u>5</u>	<u>5.71</u>	<u>16.77</u>	<u>177</u>	<u>187.1</u>	<u>3.36</u>	<u>.48</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 200 Friendship Ln Sample Date: 11-12-12 Sample Time: 1530 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

WELL ID: 200 Kaye Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, B, S
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1605 Equipment Model(s): _____

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YST
 2. DK1
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1605</u>	<u>5</u>	<u>6.17</u>	<u>17.16</u>	<u>.096</u>	<u>163.5</u>	<u>5.60</u>	<u>.10</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 200 Kaye Dr Sample Date: 11-12-12 Sample Time: 1610 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

T-fitting on while sampling

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 303 Kaye Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: MJ, BS
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1615 Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1615</u>	<u>5</u>	<u>5.97</u>	<u>17.77</u>	<u>.136</u>	<u>159.7</u>	<u>5.73</u>	<u>.02</u>	—	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Baller Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 303 Kaye Dr. Sample Date: 11-12-12 Sample Time: 1620 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature [Signature]

WELL ID: 311 Kaye Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.xxx Area of Concern: _____
 Client: Owens Corning Personnel: M, B³
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No
 Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA

Date Purged: 11-12-12 Time: 1625 Equipment Model(s): _____
 Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YS1
 2. DRT
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1625</u>	<u>5</u>	<u>7.19</u>	<u>17.04</u>	<u>.184</u>	<u>139.4</u>	<u>5.75</u>	<u>3.06</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: 311 Kaye Drive Sample Date: 11-12-12 Sample Time: 1630 # of Containers: 2
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Notify resident of sample results, interested in details of "what-if" there is a chemical hit tammy.meredith88@yahoo.com

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: 412 Kaye Drive

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200.XXX Area of Concern: _____
 Client: Owens Corning Personnel: BS, MA
 Project Location: Anderson, South Carolina Weather: _____

2. WELL DATA

Date Measured: _____ Time: _____ Temporary Well: Yes No

~~Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.167 gal/ft 4-in well = 0.667 gal/ft 6-in well = 1.469 gal/ft~~

3. PURGE DATA

Date Purged: 11-12-12 Time: 1635

Equipment Model(s)

Purge Method: Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

1. YSI
 2. DET
 3. _____
 4. _____

Time	Cum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
<u>1635</u>	<u>5</u>	<u>5.98</u>	<u>18.09</u>	<u>.063</u>	<u>190.0</u>	<u>6.41</u>	<u>.39</u>		

Purge data continued on next sheet?

4. SAMPLING DATA

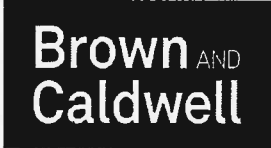
Method(s): Bailer, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: _____
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: _____ Sample Date: 11-12-12 Sample Time: 1640 # of Containers: _____
 Duplicate Sample Collected? Yes No ID: _____ # of Containers: _____
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses

Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.



GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: Surface Water

1. PROJECT INFORMATION

Project Number: 142376 Task Number: 200 Area of Concern: Surface Water
 Client: Queens Corching Personnel: Ryan Jones
 Project Location: Anderson, SC Weather: 45° overcast

2. WELL DATA Date Measured: _____ Time: _____ Temporary Well: Yes No

Casing Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Screen Diameter: _____ inches Type: PVC Stainless Galv. Steel Teflon® Other: _____
 Total Depth of Well: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Static Water: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Depth to Product: _____ feet From: Top of Well Casing (TOC) Top of Protective Casing Other: _____
 Length of Water Column: _____ feet Well Volume: _____ gal Screened Interval (from GS): _____
 Note: 1-in well = 0.041 gal/ft 2-in well = 0.163 gal/ft 4-in well = 0.663 gal/ft 6-in well = 1.469 gal/ft

3. PURGE DATA Date Purged: 11-15-12 Time: AM Equipment Model(s)

Purge Method: Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: 250 mL bottle 1. YSI 556
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: Plastic bottle 2. Cartridge 2020
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Rope/Tubing Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable 3. _____
 4. _____
 Volume to Purge (minimum): _____ well volumes or _____ gallons
 Was well purged dry? Yes No Pumping Rate: _____ gal/min Calibrated? Yes No

Sample Time	Gum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0843	SW-10	7.40	10.37	0.222	73.3	9.64	13.1	—	
0850	SW-6	7.49	10.48	0.232	64.1	9.51	18.6	—	
0900	SW-1	7.48	10.41	0.252	67.8	9.23	11.61	—	
→ DUP-111512									
0854	SW-15	7.49	10.50	0.223	73.3	9.41	10.21	—	

Purge data continued on next sheet?

4. SAMPLING DATA

Method(s): Baller, Size: _____ Bladder Pump 2" Sub. Pump 4" Sub. Pump
 Centrifugal Pump Peristaltic Pump Inertial Lift Pump Other: 250 mL bottle
 Materials: Pump/Bailer Polyethylene Stainless PVC Teflon® Other: bottle
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Materials: Tubing/Rope Polyethylene Polypropylene Teflon® Nylon Other: _____
 Dedicated Prepared Off-Site Field-Cleaned Disposable
 Depth to Water at Time of Sampling: _____ Field Filtered? Yes No
 Sample ID: _____ Sample Date: 11-15-12 Sample Time: _____ # of Containers: 20
 Duplicate Sample Collected? Yes No ID: DUP-111512 # of Containers: 2
 Equipment Blank Collected? Yes No ID: _____ # of Containers: _____

Geochemical Analyses
 Ferrous Iron: _____ mg/L
 DO: _____ mg/L
 Nitrate: _____ mg/L
 Sulfate: _____ mg/L
 Alkalinity: _____ mg/L

5. COMMENTS Duplicate collected from SW-1, water collected in 250 mL clean bottle & poured into HCl preserved VOA's SW-3B was dry.

Note: Include comments such as well condition, odor, presence of NAPL, or other items not on the field data sheet.

Signature:

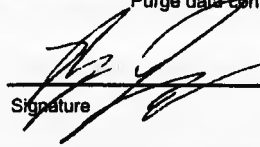
GROUNDWATER SAMPLING FIELD DATA SHEET

WELL ID: Surface Water

3. PURGE DATA (continued from page 1)

Sample Time	Gum. Gallons Removed (gal)	pH ±0.1 su	Temp ±2°C	Spec. Cond. > of ±3% or ±10 µS/cm	ORP > of ±10% or ±20 mV	DO > of ±10% or ±0.2 mg/L	Turbidity ≤ 10 NTU	Water Level	Comments
0908	SW-14	7.56	10.34	0.294	68.4	8.77	12.6	—	
0915	SW-12	7.70	10.57	0.419	68.8	8.90	11.8	—	
0912	SW-11	7.65	10.86	0.360	69.6	8.84	9.05	—	
0905	SW-13	7.75	10.34	0.233	67.8	9.16	9.75	—	
1015	SW-3	8.12	11.80	0.331	52.8	9.49	38.3	—	
1020	SW-3A	8.18	12.49	0.543	42.6	8.48	41.1	—	
—	SW-3B	DRY						—	

Purge data continued on next sheet?

Signature 

Appendix B: Laboratory Analytical Reports



September 07, 2012

Tamara Berryman
BROWN AND CALDWELL
990 Hammond Drive
Atlanta GA 30328

TEL: (770) 394-2997
FAX: (770) 396-9495

RE: Owens Corning

Dear Tamara Berryman:

Order No: 1208E96

Analytical Environmental Services, Inc. received 33 samples on August 17, 2012 6:00 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/12-06/30/13.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/13.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Kathryn Waters
Project Manager

Revision 9/7/2012



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1208E96

Date: 8-17-12 Page 1 of 3

COMPANY		ADDRESS		ANALYSIS REQUESTED												Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers																						
Brown + Caldwell		990 Hammond Drive Ste 400 Atlanta, Ga 30328																																						
PHONE:		FAX:		<table border="1" style="width:100%; height: 100%; text-align: center;"> <tr><td colspan="12">PRESERVATION (See codes)</td></tr> <tr><td colspan="12">REMARKS</td></tr> </table>												PRESERVATION (See codes)												REMARKS												
PRESERVATION (See codes)																																								
REMARKS																																								
SAMPLED BY: George Skala / Ken Whetstone		SIGNATURE: <i>[Signature]</i>																																						
#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)	VOL																																	
1	MW-15	8-15-12	1610	X		GW	X													2																				
2	MW-22	8-17-12	1145	X		GW														2																				
3	MW-35	8-15-12	1910	X		GW														2																				
4	MW-29R Zone 3	8-17-12	0915	X		GW														2																				
5	MW-29R Zone 4	8-16-12	1810	X		GW														2																				
6	MW-36 Zone 1	8-16-12	1600			GW														2																				
7	MW-36 Zone 3	8-17-12	1310			GW														2																				
8	MW-36 Zone 5	8-16-12	1235			GW														2																				
9	MW-37 Zone 1	8-16-12	1930			GW														2																				
10	MW-37 Zone 2	8-16-12	1345			GW														2																				
11	Dmp-081612	8-16-12	1200			GW														2																				
12	MW-37 Zone 3	8-16-12	1025			GW														2																				
13	FB-081612	08-16-12	1025			GW														2																				
14	MW-38 Zone 1	08-14-12	1845			GW														2																				

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	PROJECT INFORMATION	RECEIPT
1: <i>[Signature]</i>	8-17-12 / 1800	1: <i>[Signature]</i>	8/17/12 6:00	PROJECT NAME: Owens-Corning PROJECT #: 142376 SITE ADDRESS: Anderson, SC SEND REPORT TO: T Berryman @ brownca.la.com	Total # of Containers
2:		2:		INVOICE TO: (IF DIFFERENT FROM ABOVE)	<input checked="" type="radio"/> Turnaround Time Request <input type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other
3:		3:		QUOTE #:	STATE PROGRAM (if any): E-mail? <input checked="" type="radio"/> N; Fax? <input type="radio"/> Y
SPECIAL INSTRUCTIONS/COMMENTS: See focused list of VOC				SHIPMENT METHOD: OUT / / VIA: IN / / VIA: <input checked="" type="radio"/> CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER	DATA PACKAGE: I <input checked="" type="radio"/> III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1208E96

Date: 8-17-12 Page 2 of 3

COMPANY:		ADDRESS:					ANALYSIS REQUESTED										Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers				
Brown + Caldwell		990 Hammond Drive Ste 400 Atlanta, Ga 30328																					
PHONE:		SIGNATURE:					PRESERVATION (See codes)										REMARKS						
		George Skala / Ken Whetstone																					
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	HH																
		DATE	TIME																				
1	MW-38 Zone 2	8-17-12	1050	X		GW	X																2
2	MW-39 Zone 1	8-14-12	1125	X		GW																	2
3	MW-39 Zone 2	8-14-12	1700	X		GW																	2
4	FB-081412	8-14-12	1700			GW																	2
5	MW-39 Zone 3	8-15-12	1115			GW																	2
6	MW-41 Zone 1	8-15-12	1030			GW																	2
7	MW-41 Zone 2	8-15-12	1200			GW																	2
8	MW-41 Zone 3	8-15-12	1430			GW																	2
9	MW-42 Zone 1	8-14-12	1125			GW																	2
10	MW-42 Zone 2	8-14-12	1250			GW																	2
11	MW-42 Zone 3	8-14-12	1425			GW																	2
12	MW-43 Zone 1	8-13-12	1500			GW																	2
13	MW-43 Zone 2	8-13-12	1735			GW																	2
14	MW-43 Zone 3	8-13-12	1645			GW																	2

RELINQUISHED BY		DATE/TIME	RECEIVED BY	DATE/TIME	PROJECT INFORMATION			RECEIPT	
1: [Signature]		8-17-12 1800	1: [Signature] 8/12/12 6:00		PROJECT NAME: Owens-Corning			Total # of Containers	
2:			2:		PROJECT #: 142376			<input checked="" type="radio"/> Turnaround Time Request <input type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other	
3:			3:		SITE ADDRESS: Anderson, SC				
					SEND REPORT TO: JBerryman@browncauld.com				
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD			INVOICE TO:			STATE PROGRAM (if any):	
See forms list of VOCs		OUT / / VIA:			(IF DIFFERENT FROM ABOVE)			E-mail? (Y) N; Fax? Y (N)	
		IN / / VIA:			QUOTE #:			DATA PACKAGE: I (II) III IV	
		<input checked="" type="radio"/> CLIENT <input type="radio"/> FedEx <input type="radio"/> UPS <input type="radio"/> MAIL <input type="radio"/> COURIER <input type="radio"/> GREYHOUND <input type="radio"/> OTHER			PO#:				

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Page 3 of 49



COMPANY: Brown + Caldwell		ADDRESS: 990 Hammond Drive Ste 400 Atlanta, Ga 30328				ANALYSIS REQUESTED								Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.	No # of Containers		
PHONE:		FAX:				PRESERVATION (See codes)											
SAMPLED BY: George Akala / Ken Whetstone		SIGNATURE: <i>[Signature]</i>				REMARKS											
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	H+	PRESERVATION (See codes)								REMARKS	No # of Containers
		DATE	TIME														
1	Trip Blank					W	X										
2	Trip Blank					W											
3	Trip Blank					W											
4	FB-081512	08-15-12	1910	X		GW											
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION								RECEIPT	
1: <i>[Signature]</i>		8-17-12/1800		1: <i>[Signature]</i>		8/17/12 6:00		PROJECT NAME: Owens-Corning								Total # of Containers	
2:				2:				PROJECT #: 42376								Turnaround Time Request	
3:				3:				SITE ADDRESS: GA								<input checked="" type="radio"/> Standard 5 Business Days	
								SEND REPORT TO: Tberryman@brownca12.com								<input type="radio"/> 2 Business Day Rush	
SPECIAL INSTRUCTIONS/COMMENTS:				SHIPMENT METHOD				INVOICE TO:								<input type="radio"/> Next Business Day Rush	
See focused list of VOCs				OUT / VIA:				(IF DIFFERENT FROM ABOVE)								<input type="radio"/> Same Day Rush (auth req.)	
				IN / VIA:				QUOTE #:								<input type="radio"/> Other	
				FedEx UPS MAIL COURIER				STATE PROGRAM (if any):								E-mail? <input checked="" type="radio"/> Y / N; Fax? Y <input checked="" type="radio"/> / N	
				GREYHOUND OTHER				DATA PACKAGE: I <input checked="" type="radio"/> II III IV									

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Page 4 of 49

Focused 8260 list (16 constituents):

Tetrachloroethene

Trichloroethene

1,1,1-trichloroethane

1,1-dichloroethane(DCA)

1,2-DCA

1,1-dichloroethene(DCE)

cis-1,2-DCE

trans-1,2-DCE

vinyl chloride

carbon tetrachloride

chloroform

methylene chloride

benzene

ethylbenzene

toluene

xlenes.

Focused 8260 list (16 constituents):

Tetrachloroethene
Trichloroethene
1,1,1-trichloroethane
1,1-dichloroethane(DCA)
1,2-DCA
1,1-dichloroethene(DCE)
cis-1,2-DCE
trans-1,2-DCE
vinyl chloride
carbon tetrachloride
chloroform
methylene chloride
benzene
ethylbenzene
toluene
xylenes

Client: BROWN AND CALDWELL
Project: Owens Corning
Lab ID: 1208E96

Case Narrative

Sample "FB-081312" (1208E96-033A) was not listed on the chain of custody, but received by the laboratory. The sample was analyzed for Volatile Organic Compounds (VOC) by method SW8260 per email instructions from Tamara Berryman on 8/21/12 at 10:17 pm.

Sample 1208E96-002A (MW-22) was placed on hold per email instructions from Tamara Berryman on 8/30/12 at 11:14am.

Client: BROWN AND CALDWELL	Client Sample ID: MW-15
Project Name: Owens Corning	Collection Date: 8/15/2012 4:10:00 PM
Lab ID: 1208E96-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 15:14	DB
1,1-Dichloroethene	290	50		ug/L	165667	10	08/27/2012 14:03	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 15:14	DB
Surr: 4-Bromofluorobenzene	90.8	67.4-123		%REC	165667	1	08/25/2012 15:14	DB
Surr: 4-Bromofluorobenzene	91.9	67.4-123		%REC	165667	10	08/27/2012 14:03	DB
Surr: Dibromofluoromethane	98.3	75.5-128		%REC	165667	1	08/25/2012 15:14	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165667	10	08/27/2012 14:03	DB
Surr: Toluene-d8	94.8	70-120		%REC	165667	1	08/25/2012 15:14	DB
Surr: Toluene-d8	95.4	70-120		%REC	165667	10	08/27/2012 14:03	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-35
Project Name: Owens Corning	Collection Date: 8/15/2012 7:10:00 PM
Lab ID: 1208E96-003	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 16:15	DB
1,1-Dichloroethene	280	50		ug/L	165667	10	08/27/2012 14:32	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 16:15	DB
Surr: 4-Bromofluorobenzene	91	67.4-123		%REC	165667	1	08/25/2012 16:15	DB
Surr: 4-Bromofluorobenzene	93.3	67.4-123		%REC	165667	10	08/27/2012 14:32	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	1	08/25/2012 16:15	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	10	08/27/2012 14:32	DB
Surr: Toluene-d8	95.1	70-120		%REC	165667	10	08/27/2012 14:32	DB
Surr: Toluene-d8	97.7	70-120		%REC	165667	1	08/25/2012 16:15	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-29R ZONE 3
Project Name: Owens Corning	Collection Date: 8/17/2012 9:15:00 AM
Lab ID: 1208E96-004	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 16:45	DB
1,1-Dichloroethene	370	50		ug/L	165667	10	08/27/2012 15:02	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Chloroform	12	5.0		ug/L	165667	1	08/25/2012 16:45	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Carbon tetrachloride	17	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 16:45	DB
Surr: 4-Bromofluorobenzene	89.8	67.4-123		%REC	165667	1	08/25/2012 16:45	DB
Surr: 4-Bromofluorobenzene	93.7	67.4-123		%REC	165667	10	08/27/2012 15:02	DB
Surr: Dibromofluoromethane	100	75.5-128		%REC	165667	1	08/25/2012 16:45	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165667	10	08/27/2012 15:02	DB
Surr: Toluene-d8	93.9	70-120		%REC	165667	1	08/25/2012 16:45	DB
Surr: Toluene-d8	95.4	70-120		%REC	165667	10	08/27/2012 15:02	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-29R ZONE 4
Project Name: Owens Corning	Collection Date: 8/16/2012 6:10:00 PM
Lab ID: 1208E96-005	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 17:14	DB
1,1-Dichloroethene	380	50		ug/L	165667	10	08/27/2012 15:31	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Chloroform	12	5.0		ug/L	165667	1	08/25/2012 17:14	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Carbon tetrachloride	16	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 17:14	DB
Surr: 4-Bromofluorobenzene	86.9	67.4-123		%REC	165667	1	08/25/2012 17:14	DB
Surr: 4-Bromofluorobenzene	95.6	67.4-123		%REC	165667	10	08/27/2012 15:31	DB
Surr: Dibromofluoromethane	99.6	75.5-128		%REC	165667	1	08/25/2012 17:14	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	10	08/27/2012 15:31	DB
Surr: Toluene-d8	93.5	70-120		%REC	165667	1	08/25/2012 17:14	DB
Surr: Toluene-d8	95.1	70-120		%REC	165667	10	08/27/2012 15:31	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE 1
Project Name: Owens Corning	Collection Date: 8/16/2012 4:00:00 PM
Lab ID: 1208E96-006	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 17:44	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 17:44	DB
Surr: 4-Bromofluorobenzene	88	67.4-123		%REC	165667	1	08/25/2012 17:44	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165667	1	08/25/2012 17:44	DB
Surr: Toluene-d8	95.5	70-120		%REC	165667	1	08/25/2012 17:44	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE 3
Project Name: Owens Corning	Collection Date: 8/17/2012 1:10:00 PM
Lab ID: 1208E96-007	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 18:14	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 18:14	DB
Surr: 4-Bromofluorobenzene	89.8	67.4-123		%REC	165667	1	08/25/2012 18:14	DB
Surr: Dibromofluoromethane	99.2	75.5-128		%REC	165667	1	08/25/2012 18:14	DB
Surr: Toluene-d8	96.7	70-120		%REC	165667	1	08/25/2012 18:14	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE 5
Project Name: Owens Corning	Collection Date: 8/16/2012 12:35:00 PM
Lab ID: 1208E96-008	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 18:43	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 18:43	DB
Surr: 4-Bromofluorobenzene	92.6	67.4-123		%REC	165667	1	08/25/2012 18:43	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	1	08/25/2012 18:43	DB
Surr: Toluene-d8	95.1	70-120		%REC	165667	1	08/25/2012 18:43	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE 1
Project Name: Owens Corning	Collection Date: 8/16/2012 7:30:00 PM
Lab ID: 1208E96-009	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 19:13	DB
1,1-Dichloroethene	12	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 19:13	DB
Surr: 4-Bromofluorobenzene	88.4	67.4-123		%REC	165667	1	08/25/2012 19:13	DB
Surr: Dibromofluoromethane	87.3	75.5-128		%REC	165667	1	08/25/2012 19:13	DB
Surr: Toluene-d8	93.7	70-120		%REC	165667	1	08/25/2012 19:13	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE 2
Project Name: Owens Corning	Collection Date: 8/16/2012 1:45:00 PM
Lab ID: 1208E96-010	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 19:43	DB
1,1-Dichloroethene	35	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 19:43	DB
Surr: 4-Bromofluorobenzene	88.9	67.4-123		%REC	165667	1	08/25/2012 19:43	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	1	08/25/2012 19:43	DB
Surr: Toluene-d8	93.4	70-120		%REC	165667	1	08/25/2012 19:43	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: DUP-081612
Project Name: Owens Corning	Collection Date: 8/16/2012 12:00:00 PM
Lab ID: 1208E96-011	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/26/2012 00:10	DB
1,1-Dichloroethene	38	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Benzene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Toluene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/26/2012 00:10	DB
Surr: 4-Bromofluorobenzene	88.8	67.4-123		%REC	165667	1	08/26/2012 00:10	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165667	1	08/26/2012 00:10	DB
Surr: Toluene-d8	97.3	70-120		%REC	165667	1	08/26/2012 00:10	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE 3
Project Name: Owens Corning	Collection Date: 8/16/2012 10:25:00 AM
Lab ID: 1208E96-012	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 20:13	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 20:13	DB
Surr: 4-Bromofluorobenzene	91.1	67.4-123		%REC	165667	1	08/25/2012 20:13	DB
Surr: Dibromofluoromethane	100	75.5-128		%REC	165667	1	08/25/2012 20:13	DB
Surr: Toluene-d8	92.7	70-120		%REC	165667	1	08/25/2012 20:13	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: FB-081612
Project Name: Owens Corning	Collection Date: 8/16/2012 10:25:00 AM
Lab ID: 1208E96-013	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 23:41	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 23:41	DB
Surr: 4-Bromofluorobenzene	88.9	67.4-123		%REC	165667	1	08/25/2012 23:41	DB
Surr: Dibromofluoromethane	103	75.5-128		%REC	165667	1	08/25/2012 23:41	DB
Surr: Toluene-d8	93.1	70-120		%REC	165667	1	08/25/2012 23:41	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-38 ZONE 1
Project Name: Owens Corning	Collection Date: 8/14/2012 6:45:00 PM
Lab ID: 1208E96-014	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 20:43	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 20:43	DB
Surr: 4-Bromofluorobenzene	89.4	67.4-123		%REC	165667	1	08/25/2012 20:43	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165667	1	08/25/2012 20:43	DB
Surr: Toluene-d8	94.4	70-120		%REC	165667	1	08/25/2012 20:43	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-38 ZONE 2
Project Name: Owens Corning	Collection Date: 8/17/2012 10:50:00 AM
Lab ID: 1208E96-015	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 21:13	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 21:13	DB
Surr: 4-Bromofluorobenzene	89.2	67.4-123		%REC	165667	1	08/25/2012 21:13	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165667	1	08/25/2012 21:13	DB
Surr: Toluene-d8	93.5	70-120		%REC	165667	1	08/25/2012 21:13	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE 1
Project Name: Owens Corning	Collection Date: 8/14/2012 11:25:00 AM
Lab ID: 1208E96-016	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 21:42	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 21:42	DB
Surr: 4-Bromofluorobenzene	89.4	67.4-123		%REC	165667	1	08/25/2012 21:42	DB
Surr: Dibromofluoromethane	103	75.5-128		%REC	165667	1	08/25/2012 21:42	DB
Surr: Toluene-d8	94.1	70-120		%REC	165667	1	08/25/2012 21:42	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE 2
Project Name: Owens Corning	Collection Date: 8/14/2012 5:00:00 PM
Lab ID: 1208E96-017	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 22:12	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 22:12	DB
Surr: 4-Bromofluorobenzene	89.1	67.4-123		%REC	165667	1	08/25/2012 22:12	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165667	1	08/25/2012 22:12	DB
Surr: Toluene-d8	95.7	70-120		%REC	165667	1	08/25/2012 22:12	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: FB-081412
Project Name: Owens Corning	Collection Date: 8/14/2012 5:00:00 PM
Lab ID: 1208E96-018	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 22:42	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 22:42	DB
Surr: 4-Bromofluorobenzene	89.3	67.4-123		%REC	165667	1	08/25/2012 22:42	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165667	1	08/25/2012 22:42	DB
Surr: Toluene-d8	93.2	70-120		%REC	165667	1	08/25/2012 22:42	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE 3
Project Name: Owens Corning	Collection Date: 8/15/2012 11:15:00 AM
Lab ID: 1208E96-019	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/25/2012 23:11	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Benzene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Toluene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/25/2012 23:11	DB
Surr: 4-Bromofluorobenzene	90.6	67.4-123		%REC	165667	1	08/25/2012 23:11	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165667	1	08/25/2012 23:11	DB
Surr: Toluene-d8	95	70-120		%REC	165667	1	08/25/2012 23:11	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE 1
Project Name: Owens Corning	Collection Date: 8/15/2012 10:30:00 AM
Lab ID: 1208E96-020	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165667	1	08/27/2012 19:49	DB
1,1-Dichloroethene	200	50		ug/L	165667	10	08/25/2012 14:44	DB
Methylene chloride	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Chloroform	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Carbon tetrachloride	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Benzene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Trichloroethene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Toluene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Tetrachloroethene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Ethylbenzene	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Xylenes, Total	BRL	5.0		ug/L	165667	1	08/27/2012 19:49	DB
Surr: 4-Bromofluorobenzene	87.6	67.4-123		%REC	165667	1	08/27/2012 19:49	DB
Surr: 4-Bromofluorobenzene	94.7	67.4-123		%REC	165667	10	08/25/2012 14:44	DB
Surr: Dibromofluoromethane	95	75.5-128		%REC	165667	10	08/25/2012 14:44	DB
Surr: Dibromofluoromethane	101	75.5-128		%REC	165667	1	08/27/2012 19:49	DB
Surr: Toluene-d8	95.8	70-120		%REC	165667	1	08/27/2012 19:49	DB
Surr: Toluene-d8	96.7	70-120		%REC	165667	10	08/25/2012 14:44	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE 2
Project Name: Owens Corning	Collection Date: 8/15/2012 12:00:00 PM
Lab ID: 1208E96-021	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 07:17	DB
1,1-Dichloroethene	360	50		ug/L	165649	10	08/27/2012 16:01	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 07:17	DB
Surr: 4-Bromofluorobenzene	88.8	67.4-123		%REC	165649	1	08/25/2012 07:17	DB
Surr: 4-Bromofluorobenzene	94.1	67.4-123		%REC	165649	10	08/27/2012 16:01	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165649	1	08/25/2012 07:17	DB
Surr: Dibromofluoromethane	104	75.5-128		%REC	165649	10	08/27/2012 16:01	DB
Surr: Toluene-d8	95.7	70-120		%REC	165649	1	08/25/2012 07:17	DB
Surr: Toluene-d8	97	70-120		%REC	165649	10	08/27/2012 16:01	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE 3
Project Name: Owens Corning	Collection Date: 8/15/2012 2:30:00 PM
Lab ID: 1208E96-022	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 07:47	DB
1,1-Dichloroethene	8.9	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 07:47	DB
Surr: 4-Bromofluorobenzene	92.7	67.4-123		%REC	165649	1	08/25/2012 07:47	DB
Surr: Dibromofluoromethane	98.8	75.5-128		%REC	165649	1	08/25/2012 07:47	DB
Surr: Toluene-d8	92.9	70-120		%REC	165649	1	08/25/2012 07:47	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE 1
Project Name: Owens Corning	Collection Date: 8/14/2012 11:25:00 AM
Lab ID: 1208E96-023	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 08:17	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 08:17	DB
Surr: 4-Bromofluorobenzene	91.4	67.4-123		%REC	165649	1	08/25/2012 08:17	DB
Surr: Dibromofluoromethane	97.4	75.5-128		%REC	165649	1	08/25/2012 08:17	DB
Surr: Toluene-d8	94	70-120		%REC	165649	1	08/25/2012 08:17	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE 2
Project Name: Owens Corning	Collection Date: 8/14/2012 12:50:00 PM
Lab ID: 1208E96-024	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 08:46	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 08:46	DB
Surr: 4-Bromofluorobenzene	88.9	67.4-123		%REC	165649	1	08/25/2012 08:46	DB
Surr: Dibromofluoromethane	103	75.5-128		%REC	165649	1	08/25/2012 08:46	DB
Surr: Toluene-d8	95.1	70-120		%REC	165649	1	08/25/2012 08:46	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE 3
Project Name: Owens Corning	Collection Date: 8/14/2012 2:25:00 PM
Lab ID: 1208E96-025	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 09:45	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 09:45	DB
Surr: 4-Bromofluorobenzene	89.2	67.4-123		%REC	165649	1	08/25/2012 09:45	DB
Surr: Dibromofluoromethane	102	75.5-128		%REC	165649	1	08/25/2012 09:45	DB
Surr: Toluene-d8	95.6	70-120		%REC	165649	1	08/25/2012 09:45	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE 1
Project Name: Owens Corning	Collection Date: 8/13/2012 3:00:00 PM
Lab ID: 1208E96-026	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165412	1	08/24/2012 16:44	NP
1,1-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Methylene chloride	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
1,1-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Chloroform	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Carbon tetrachloride	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Benzene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
1,2-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Trichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Toluene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Tetrachloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Ethylbenzene	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Xylenes, Total	BRL	5.0		ug/L	165412	1	08/24/2012 16:44	NP
Surr: 4-Bromofluorobenzene	96	67.4-123		%REC	165412	1	08/24/2012 16:44	NP
Surr: Dibromofluoromethane	105	75.5-128		%REC	165412	1	08/24/2012 16:44	NP
Surr: Toluene-d8	106	70-120		%REC	165412	1	08/24/2012 16:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE 2
Project Name: Owens Corning	Collection Date: 8/13/2012 5:25:00 PM
Lab ID: 1208E96-027	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165412	1	08/24/2012 15:47	NP
1,1-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Methylene chloride	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Chloroform	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Carbon tetrachloride	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Benzene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Trichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Toluene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Tetrachloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Ethylbenzene	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Xylenes, Total	BRL	5.0		ug/L	165412	1	08/24/2012 15:47	NP
Surr: 4-Bromofluorobenzene	96.4	67.4-123		%REC	165412	1	08/24/2012 15:47	NP
Surr: Dibromofluoromethane	99.3	75.5-128		%REC	165412	1	08/24/2012 15:47	NP
Surr: Toluene-d8	100	70-120		%REC	165412	1	08/24/2012 15:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE 3
Project Name: Owens Corning	Collection Date: 8/13/2012 4:45:00 PM
Lab ID: 1208E96-028	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165412	1	08/24/2012 16:15	NP
1,1-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Methylene chloride	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
1,1-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Chloroform	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Carbon tetrachloride	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Benzene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
1,2-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Trichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Toluene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Tetrachloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Ethylbenzene	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Xylenes, Total	BRL	5.0		ug/L	165412	1	08/24/2012 16:15	NP
Surr: 4-Bromofluorobenzene	94.1	67.4-123		%REC	165412	1	08/24/2012 16:15	NP
Surr: Dibromofluoromethane	104	75.5-128		%REC	165412	1	08/24/2012 16:15	NP
Surr: Toluene-d8	103	70-120		%REC	165412	1	08/24/2012 16:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TRIP BLANK
Project Name: Owens Corning	Collection Date: 8/14/2012
Lab ID: 1208E96-029	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 04:20	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 04:20	DB
Surr: 4-Bromofluorobenzene	91.7	67.4-123		%REC	165649	1	08/25/2012 04:20	DB
Surr: Dibromofluoromethane	97.2	75.5-128		%REC	165649	1	08/25/2012 04:20	DB
Surr: Toluene-d8	92	70-120		%REC	165649	1	08/25/2012 04:20	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TRIP BLANK
Project Name: Owens Corning	Collection Date: 8/14/2012
Lab ID: 1208E96-030	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 04:49	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 04:49	DB
Surr: 4-Bromofluorobenzene	90.2	67.4-123		%REC	165649	1	08/25/2012 04:49	DB
Surr: Dibromofluoromethane	94.5	75.5-128		%REC	165649	1	08/25/2012 04:49	DB
Surr: Toluene-d8	91.5	70-120		%REC	165649	1	08/25/2012 04:49	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TRIP BLANK
Project Name: Owens Corning	Collection Date: 8/14/2012
Lab ID: 1208E96-031	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 05:19	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 05:19	DB
Surr: 4-Bromofluorobenzene	89.8	67.4-123		%REC	165649	1	08/25/2012 05:19	DB
Surr: Dibromofluoromethane	98.6	75.5-128		%REC	165649	1	08/25/2012 05:19	DB
Surr: Toluene-d8	92.5	70-120		%REC	165649	1	08/25/2012 05:19	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: FB-081512
Project Name: Owens Corning	Collection Date: 8/15/2012 7:10:00 PM
Lab ID: 1208E96-032	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165649	1	08/25/2012 09:16	DB
1,1-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Methylene chloride	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
1,1-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Chloroform	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Carbon tetrachloride	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Benzene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
1,2-Dichloroethane	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Trichloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Toluene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Tetrachloroethene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Ethylbenzene	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Xylenes, Total	BRL	5.0		ug/L	165649	1	08/25/2012 09:16	DB
Surr: 4-Bromofluorobenzene	88.8	67.4-123		%REC	165649	1	08/25/2012 09:16	DB
Surr: Dibromofluoromethane	103	75.5-128		%REC	165649	1	08/25/2012 09:16	DB
Surr: Toluene-d8	94.8	70-120		%REC	165649	1	08/25/2012 09:16	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: FB-081312
Project Name: Owens Corning	Collection Date: 8/13/2012 12:00:00 PM
Lab ID: 1208E96-033	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	165412	1	08/24/2012 17:13	NP
1,1-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Methylene chloride	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
1,1-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Chloroform	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Carbon tetrachloride	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Benzene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
1,2-Dichloroethane	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Trichloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Toluene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Tetrachloroethene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Ethylbenzene	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Xylenes, Total	BRL	5.0		ug/L	165412	1	08/24/2012 17:13	NP
Surr: 4-Bromofluorobenzene	91.5	67.4-123		%REC	165412	1	08/24/2012 17:13	NP
Surr: Dibromofluoromethane	102	75.5-128		%REC	165412	1	08/24/2012 17:13	NP
Surr: Toluene-d8	106	70-120		%REC	165412	1	08/24/2012 17:13	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell

Work Order Number 1208E96

Checklist completed by ~~BM~~ 8/20/12
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present *BM 8/20*
- Container/Temp Blank temperature in compliance? (4°C±2)* Yes No
- Cooler #1 4.0 Cooler #2 3.7 Cooler #3 Cooler #4 Cooler#5 Cooler #6
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Was TAT marked on the COC? Yes No
- Proceed with Standard TAT as per project history? Yes No Not Applicable
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? Checked by

Sample Condition: Good Other(Explain)

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: BROWN AND CALDWELL
 Project: Owens Corning
 Lab Order: 1208E96

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1208E96-001A	MW-15	8/15/2012 4:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-001A	MW-15	8/15/2012 4:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-002A	MW-22	8/17/2012 11:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-003A	MW-35	8/15/2012 7:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-003A	MW-35	8/15/2012 7:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-004A	MW-29R ZONE 3	8/17/2012 9:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-004A	MW-29R ZONE 3	8/17/2012 9:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-005A	MW-29R ZONE 4	8/16/2012 6:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-005A	MW-29R ZONE 4	8/16/2012 6:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-006A	MW-36 ZONE 1	8/16/2012 4:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-007A	MW-36 ZONE 3	8/17/2012 1:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-008A	MW-36 ZONE 5	8/16/2012 12:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-009A	MW-37 ZONE 1	8/16/2012 7:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-010A	MW-37 ZONE 2	8/16/2012 1:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-011A	DUP-081612	8/16/2012 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/26/2012
1208E96-012A	MW-37 ZONE 3	8/16/2012 10:25:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-013A	FB-081612	8/16/2012 10:25:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-014A	MW-38 ZONE 1	8/14/2012 6:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-015A	MW-38 ZONE 2	8/17/2012 10:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-016A	MW-39 ZONE 1	8/14/2012 11:25:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-017A	MW-39 ZONE 2	8/14/2012 5:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-018A	FB-081412	8/14/2012 5:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-019A	MW-39 ZONE 3	8/15/2012 11:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-020A	MW-41 ZONE 1	8/15/2012 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-021A	MW-41 ZONE 2	8/15/2012 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-021A	MW-41 ZONE 2	8/15/2012 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/27/2012
1208E96-022A	MW-41 ZONE 3	8/15/2012 2:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-023A	MW-42 ZONE 1	8/14/2012 11:25:00AM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-024A	MW-42 ZONE 2	8/14/2012 12:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012

Client: BROWN AND CALDWELL
Project: Owens Corning
Lab Order: 1208E96

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1208E96-025A	MW-42 ZONE 3	8/14/2012 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-026A	MW-43 ZONE 1	8/13/2012 3:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/20/2012	08/24/2012
1208E96-027A	MW-43 ZONE 2	8/13/2012 5:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/20/2012	08/24/2012
1208E96-028A	MW-43 ZONE 3	8/13/2012 4:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/20/2012	08/24/2012
1208E96-029A	TRIP BLANK	8/14/2012 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-030A	TRIP BLANK	8/14/2012 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-031A	TRIP BLANK	8/14/2012 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-032A	FB-081512	8/15/2012 7:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/25/2012	08/25/2012
1208E96-033A	FB-081312	8/13/2012 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		08/20/2012	08/24/2012

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165412

Sample ID: MB-165412	Client ID:	Units: ug/L	Prep Date: 08/20/2012	Run No: 227328							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165412	Analysis Date: 08/20/2012	Seq No: 4758061							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	39.51	0	50	0	79	67.4	123	0	0	0	0
Surr: Dibromofluoromethane	51.61	0	50	0	103	75.5	128	0	0	0	0
Surr: Toluene-d8	42.82	0	50	0	85.6	70	120	0	0	0	0

Sample ID: LCS-165412	Client ID:	Units: ug/L	Prep Date: 08/20/2012	Run No: 227328							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165412	Analysis Date: 08/20/2012	Seq No: 4758060							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	36.25	5.0	50	0	72.5	60	140	0	0	0	0
Benzene	56.23	5.0	50	0	112	70	130	0	0	0	0
Toluene	49.28	5.0	50	0	98.6	70	130	0	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165412

Sample ID: LCS-165412	Client ID:	Units: ug/L	Prep Date: 08/20/2012	Run No: 227328							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165412	Analysis Date: 08/20/2012	Seq No: 4758060							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Trichloroethene	60.81	5.0	50	0	122	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	52.00	0	50	0	104	67.4	123	0	0	0	
Surr: Dibromofluoromethane	53.21	0	50	0	106	75.5	128	0	0	0	
Surr: Toluene-d8	51.86	0	50	0	104	70	120	0	0	0	

Sample ID: 1208C56-002AMS	Client ID:	Units: ug/L	Prep Date: 08/20/2012	Run No: 227328							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165412	Analysis Date: 08/20/2012	Seq No: 4758089							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	25190	2500	25000	1390	95.2	50.1	179	0	0	0	
Benzene	31950	2500	25000	0	128	61.2	150	0	0	0	
Toluene	27590	2500	25000	0	110	58.7	154	0	0	0	
Trichloroethene	33280	2500	25000	0	133	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	25890	0	25000	0	104	67.4	123	0	0	0	
Surr: Dibromofluoromethane	29140	0	25000	0	117	75.5	128	0	0	0	
Surr: Toluene-d8	24890	0	25000	0	99.5	70	120	0	0	0	

Sample ID: 1208C56-002AMSD	Client ID:	Units: ug/L	Prep Date: 08/20/2012	Run No: 227328							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165412	Analysis Date: 08/20/2012	Seq No: 4758091							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	22170	2500	25000	1390	83.1	50.1	179	25190	12.8	23.3	
Benzene	31050	2500	25000	0	124	61.2	150	31950	2.84	19	
Toluene	26560	2500	25000	0	106	58.7	154	27590	3.82	20	
Trichloroethene	32260	2500	25000	0	129	68.3	149	33280	3.11	17.7	
Surr: 4-Bromofluorobenzene	25890	0	25000	0	104	67.4	123	25890	0	0	
Surr: Dibromofluoromethane	28560	0	25000	0	114	75.5	128	29140	0	0	
Surr: Toluene-d8	23920	0	25000	0	95.7	70	120	24890	0	0	

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165649

Sample ID: MB-165649	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227723
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/25/2012	Seq No: 4765878

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	44.63	0	50	0	89.3	67.4	123	0	0	0	
Surr: Dibromofluoromethane	51.17	0	50	0	102	75.5	128	0	0	0	
Surr: Toluene-d8	47.65	0	50	0	95.3	70	120	0	0	0	

Sample ID: MB-165649	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227888
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/28/2012	Seq No: 4769747

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	43.71	0	50	0	87.4	67.4	123	0	0	0	
Surr: Dibromofluoromethane	49.97	0	50	0	99.9	75.5	128	0	0	0	
Surr: Toluene-d8	47.58	0	50	0	95.2	70	120	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165649

Sample ID: LCS-165649	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227723							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/25/2012	Seq No: 4765877							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	51.54	5.0	50	0	103	60	140	0	0	0	
Benzene	54.77	5.0	50	0	110	70	130	0	0	0	
Toluene	53.88	5.0	50	0	108	70	130	0	0	0	
Trichloroethene	50.91	5.0	50	0	102	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	49.15	0	50	0	98.3	67.4	123	0	0	0	
Surr: Dibromofluoromethane	49.77	0	50	0	99.5	75.5	128	0	0	0	
Surr: Toluene-d8	47.92	0	50	0	95.8	70	120	0	0	0	

Sample ID: 1208H30-004AMS	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227723							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/25/2012	Seq No: 4765941							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	517.4	50	500	0	103	50.1	179	0	0	0	
Benzene	575.5	50	500	0	115	61.2	150	0	0	0	
Toluene	617.3	50	500	44.00	115	58.7	154	0	0	0	
Trichloroethene	520.0	50	500	0	104	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	502.9	0	500	0	101	67.4	123	0	0	0	
Surr: Dibromofluoromethane	484.4	0	500	0	96.9	75.5	128	0	0	0	
Surr: Toluene-d8	479.0	0	500	0	95.8	70	120	0	0	0	

Sample ID: 1208H30-004AMSD	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227723							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/25/2012	Seq No: 4765942							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	528.9	50	500	0	106	50.1	179	517.4	2.2	23.3	
Benzene	576.3	50	500	0	115	61.2	150	575.5	0.139	19	
Toluene	607.7	50	500	44.00	113	58.7	154	617.3	1.57	20	
Trichloroethene	517.0	50	500	0	103	68.3	149	520.0	0.579	17.7	

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165649

Sample ID: 1208H30-004AMSD	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227723							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165649	Analysis Date: 08/25/2012	Seq No: 4765942							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	500.1	0	500	0	100	67.4	123	502.9	0	0	
Surr: Dibromofluoromethane	499.5	0	500	0	99.9	75.5	128	484.4	0	0	
Surr: Toluene-d8	481.5	0	500	0	96.3	70	120	479.0	0	0	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165667

Sample ID: MB-165667	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227753
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165667	Analysis Date: 08/25/2012	Seq No: 4766485

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	44.47	0	50	0	88.9	67.4	123	0	0	0	
Surr: Dibromofluoromethane	50.61	0	50	0	101	75.5	128	0	0	0	
Surr: Toluene-d8	47.58	0	50	0	95.2	70	120	0	0	0	

Sample ID: LCS-165667	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227753
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165667	Analysis Date: 08/25/2012	Seq No: 4766480

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.62	5.0	50	0	93.2	60	140	0	0	0	
Benzene	51.32	5.0	50	0	103	70	130	0	0	0	
Toluene	50.23	5.0	50	0	100	70	130	0	0	0	
Trichloroethene	47.87	5.0	50	0	95.7	70	130	0	0	0	

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1208E96

ANALYTICAL QC SUMMARY REPORT

BatchID: 165667

Sample ID: LCS-165667	Client ID:	Units: ug/L	Prep Date: 08/25/2012	Run No: 227753							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165667	Analysis Date: 08/25/2012	Seq No: 4766480							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	49.78	0	50	0	99.6	67.4	123	0	0	0	
Surr: Dibromofluoromethane	51.93	0	50	0	104	75.5	128	0	0	0	
Surr: Toluene-d8	51.18	0	50	0	102	70	120	0	0	0	

Sample ID: 1208E96-006AMS	Client ID: MW-36 ZONE 1	Units: ug/L	Prep Date: 08/25/2012	Run No: 227841							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165667	Analysis Date: 08/28/2012	Seq No: 4769046							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	73.92	5.0	50	0	148	50.1	179	0	0	0	
Benzene	67.56	5.0	50	0	135	61.2	150	0	0	0	
Trichloroethene	59.24	5.0	50	0	118	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	50.42	0	50	0	101	67.4	123	0	0	0	
Surr: Dibromofluoromethane	49.78	0	50	0	99.6	75.5	128	0	0	0	
Surr: Toluene-d8	49.46	0	50	0	98.9	70	120	0	0	0	

Sample ID: 1208E96-006AMSD	Client ID: MW-36 ZONE 1	Units: ug/L	Prep Date: 08/25/2012	Run No: 227841							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 165667	Analysis Date: 08/28/2012	Seq No: 4769048							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	68.44	5.0	50	0	137	50.1	179	73.92	7.7	23.3	
Benzene	64.20	5.0	50	0	128	61.2	150	67.56	5.1	19	
Trichloroethene	56.83	5.0	50	0	114	68.3	149	59.24	4.15	17.7	
Surr: 4-Bromofluorobenzene	50.07	0	50	0	100	67.4	123	50.42	0	0	
Surr: Dibromofluoromethane	49.94	0	50	0	99.9	75.5	128	49.78	0	0	
Surr: Toluene-d8	49.02	0	50	0	98	70	120	49.46	0	0	

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	



September 16, 2012

Tamara Berryman
BROWN AND CALDWELL
990 Hammond Drive
Atlanta GA 30328

TEL: (770) 394-2997
FAX: (770) 396-9495

RE: Owens Corning

Dear Tamara Berryman:

Order No: 1209511

Analytical Environmental Services, Inc. received 2 samples on September 6, 2012 1:45 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/12-06/30/13.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/13.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Kathryn Waters
Project Manager

Client: BROWN AND CALDWELL	Client Sample ID: MW-22
Project Name: Owens Corning	Collection Date: 9/6/2012 10:20:00 AM
Lab ID: 1209511-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	166285	1	09/12/2012 17:09	NP
1,1-Dichloroethene	300	50		ug/L	166285	10	09/12/2012 19:05	NP
Methylene chloride	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
1,1-Dichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Chloroform	9.6	5.0		ug/L	166285	1	09/12/2012 17:09	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Carbon tetrachloride	21	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Benzene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
1,2-Dichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Trichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Toluene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Tetrachloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Ethylbenzene	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Xylenes, Total	BRL	5.0		ug/L	166285	1	09/12/2012 17:09	NP
Surr: 4-Bromofluorobenzene	89.8	67.4-123		%REC	166285	10	09/12/2012 19:05	NP
Surr: 4-Bromofluorobenzene	94.4	67.4-123		%REC	166285	1	09/12/2012 17:09	NP
Surr: Dibromofluoromethane	112	75.5-128		%REC	166285	10	09/12/2012 19:05	NP
Surr: Dibromofluoromethane	115	75.5-128		%REC	166285	1	09/12/2012 17:09	NP
Surr: Toluene-d8	95.2	70-120		%REC	166285	10	09/12/2012 19:05	NP
Surr: Toluene-d8	97.9	70-120		%REC	166285	1	09/12/2012 17:09	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TRIP BLANK
Project Name: Owens Corning	Collection Date: 9/6/2012
Lab ID: 1209511-002	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	166285	1	09/12/2012 16:40	NP
1,1-Dichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Methylene chloride	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
1,1-Dichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Chloroform	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
1,1,1-Trichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Carbon tetrachloride	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Benzene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
1,2-Dichloroethane	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Trichloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Toluene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Tetrachloroethene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Ethylbenzene	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Xylenes, Total	BRL	5.0		ug/L	166285	1	09/12/2012 16:40	NP
Surr: 4-Bromofluorobenzene	96.4	67.4-123		%REC	166285	1	09/12/2012 16:40	NP
Surr: Dibromofluoromethane	106	75.5-128		%REC	166285	1	09/12/2012 16:40	NP
Surr: Toluene-d8	88.6	70-120		%REC	166285	1	09/12/2012 16:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell

Work Order Number 1209511

Checklist completed by Annex 9/6/12
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 4.9 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Was TAT marked on the COC? Yes No

Proceed with Standard TAT as per project history? Yes No Not Applicable

Water - VOA vials have zero headspace? No VOA vials submitted Yes No

Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: BROWN AND CALDWELL
Project: Owens Corning
Lab Order: 1209511

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1209511-001A	MW-22	9/6/2012 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		09/10/2012	09/12/2012
1209511-002A	TRIP BLANK	9/6/2012 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		09/10/2012	09/12/2012

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1209511

ANALYTICAL QC SUMMARY REPORT

BatchID: 166285

Sample ID: MB-166285	Client ID:	Units: ug/L	Prep Date: 09/10/2012	Run No: 228664							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 166285	Analysis Date: 09/10/2012	Seq No: 4786990							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	45.29	0	50	0	90.6	67.4	123	0	0	0	0
Surr: Dibromofluoromethane	50.04	0	50	0	100	75.5	128	0	0	0	0
Surr: Toluene-d8	46.57	0	50	0	93.1	70	120	0	0	0	0

Sample ID: LCS-166285	Client ID:	Units: ug/L	Prep Date: 09/10/2012	Run No: 228664							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 166285	Analysis Date: 09/10/2012	Seq No: 4786991							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	47.61	5.0	50	0	95.2	60	140	0	0	0	0
Benzene	58.28	5.0	50	0	117	70	130	0	0	0	0
Toluene	56.96	5.0	50	0	114	70	130	0	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1209511

ANALYTICAL QC SUMMARY REPORT

BatchID: 166285

Sample ID: LCS-166285	Client ID:	Units: ug/L	Prep Date: 09/10/2012	Run No: 228664							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 166285	Analysis Date: 09/10/2012	Seq No: 4786991							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Trichloroethene	55.54	5.0	50	0	111	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	50.21	0	50	0	100	67.4	123	0	0	0	
Surr: Dibromofluoromethane	51.00	0	50	0	102	75.5	128	0	0	0	
Surr: Toluene-d8	48.24	0	50	0	96.5	70	120	0	0	0	

Sample ID: 1209150-001AMS	Client ID:	Units: ug/L	Prep Date: 09/10/2012	Run No: 228664							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 166285	Analysis Date: 09/11/2012	Seq No: 4787005							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	421.0	50	500	0	84.2	50.1	179	0	0	0	
Benzene	533.4	50	500	0	107	61.2	150	0	0	0	
Toluene	514.3	50	500	0	103	58.7	154	0	0	0	
Trichloroethene	505.7	50	500	0	101	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	500.9	0	500	0	100	67.4	123	0	0	0	
Surr: Dibromofluoromethane	496.1	0	500	0	99.2	75.5	128	0	0	0	
Surr: Toluene-d8	483.8	0	500	0	96.8	70	120	0	0	0	

Sample ID: 1209150-001AMSD	Client ID:	Units: ug/L	Prep Date: 09/10/2012	Run No: 228664							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 166285	Analysis Date: 09/11/2012	Seq No: 4787006							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	409.1	50	500	0	81.8	50.1	179	421.0	2.87	23.3	
Benzene	534.5	50	500	0	107	61.2	150	533.4	0.206	19	
Toluene	518.8	50	500	0	104	58.7	154	514.3	0.871	20	
Trichloroethene	507.9	50	500	0	102	68.3	149	505.7	0.434	17.7	
Surr: 4-Bromofluorobenzene	503.0	0	500	0	101	67.4	123	500.9	0	0	
Surr: Dibromofluoromethane	515.5	0	500	0	103	75.5	128	496.1	0	0	
Surr: Toluene-d8	488.0	0	500	0	97.6	70	120	483.8	0	0	

Qualifiers: > Greater than Result value < Less than Result value B Analyte detected in the associated method blank
 BRL Below reporting limit E Estimated (value above quantitation range) H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix



November 26, 2012

Brent Callihan
BROWN AND CALDWELL
990 Hammond Drive
Atlanta GA 30328

TEL: (770) 394-2997
FAX: (770) 396-9495

RE: Owens Corning

Dear Brent Callihan:

Order No: 1211E71

Analytical Environmental Services, Inc. received 93 samples on 11/16/2012 5:20:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/12-06/30/13.
- AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/13.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Tara Esbeck
Project Manager



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1211E71

Date: 11-16-12 Page 1 of 7

COMPANY: Brown + Caldwell		ADDRESS: 990 Hammond Dr Ste 400 Atlanta GA 30328				ANALYSIS REQUESTED						Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.			
PHONE:		FAX:				PRESERVATION (See codes)						REMARKS			
SAMPLED BY: Ryan Jones		SIGNATURE: <i>[Signature]</i>													
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	VOC	PRESERVATION (See codes)						No # of Containers	
		DATE	TIME												
1	MW-18	11-12-12	1647	X		GW	X								
2	MW-35	11-12-12	1444	X		GW	X								
3	MW-1	11-12-12	1635	X		GW	X								
4	EB111212	11-12-12	1200	X		GW	X								
5	Allay	11-12-12	1455	X		GW	X								
6	628 Airline Rd	11-12-12	1700	X		DW	X								
7	311 Kaye Drive	11-12-12	1630	X		DW	X								
8	408 Clinkscales Road	11-12-12	1450	X		DW	X								
9	605 Clinkscales Road	11-12-12	1505	X		DW	X								
10	290 Friendship Lane	11-12-12	1530	X		DW	X								
11	221 Clinkscales Road	11-12-12	1520	X		DW	X								
12	1303 Clinkscales Road	11-12-12	1550	X		DW	X								
13	200 Kaye Drive	11-12-12	1610	X		DW	X								
14	119 Clonorchill Drive	11-12-12	1600	X		DW	X								
RELINQUISHED BY: <i>[Signature]</i>		DATE/TIME: 11-16-12 1720		RECEIVED BY: <i>[Signature]</i>		DATE/TIME: 11/16/12 5:20		PROJECT INFORMATION						RECEIPT	
1:				2:				PROJECT NAME: Owens Corning						Total # of Containers: 28	
3:				3:				PROJECT #: 142376						<input checked="" type="radio"/> Turnaround Time Request <input type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other _____	
								SITE ADDRESS: Anderson, SC							
								SEND REPORT TO: theryan@brownandcaldwell.com						STATE PROGRAM (if any): _____ E-mail? Y/N; Fax? Y/N DATA PACKAGE: I II III IV	
SPECIAL INSTRUCTIONS/COMMENTS: VOC: site specific list				SHIPMENT METHOD		INVOICE TO: (IF DIFFERENT FROM ABOVE)									
				OUT / / VIA:				QUOTE #: _____ PO#: _____							
				IN <input checked="" type="radio"/> CLIENT <input type="radio"/> FedEx <input type="radio"/> UPS <input type="radio"/> MAIL <input type="radio"/> COURIER											
				<input type="radio"/> GREYHOUND <input type="radio"/> OTHER											

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Page 2 of 113



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work order # 171157

Date: 11-16-12 Page 3 of 107

COMPANY: Brown + Caldwell		ADDRESS: 990 Hammond Dr Ste 400 Atlanta GA 30328		ANALYSIS REQUESTED										Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers								
PHONE:		FAX:		PRESERVATION (See codes)										REMARKS										
SAMPLED BY: Ryan Jones		SIGNATURE: <i>[Signature]</i>		VOC 8260																				
#	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)																		
1	MW-10	11-13-12	1115	X		GW	X																	
2	MW-14	11-13-12	1245	X		GW	X																	
3	MW-3	11-13-12	1450	X		GW	X																	
4	MW-16	11-13-12	1635	X		GW	X																	
5	MW-43 Zone 3	11-13-12	1405	X		GW	X																	
6	MW-43 Zone 1	11-13-12	1710	X		GW	X																	
7	MW-43 Zone 2	11-13-12	1740	X		GW	X																	
8	MW-39 Zone 2	11-13-12	1532	X		GW	X																	
9	MW-39 Zone 3	11-13-12	1400	X		GW	X																	
10	MW-39 Zone 1	11-13-12	1225	X		GW	X																	
11	MW-25	11-14-12	0904	X		GW	X																	
12	MW-26	11-14-12	1216	X		GW	X																	
13	MW-32	11-14-12	1710	X		GW	X																	
14	TW-41	11-14-12	1438	X		GW	X																	

RELINQUISHED BY		DATE/TIME	RECEIVED BY	DATE/TIME	PROJECT INFORMATION				RECEIPT	
1: <i>[Signature]</i>		11-16-12 1720	2: <i>[Signature]</i>	11/16/12 500	PROJECT NAME: Owens Corning				Total # of Containers 28	
3:			PROJECT #: 142376				Turnaround Time Request			
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD			SITE ADDRESS: Anderson, SC				<input checked="" type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other	
VOC: site specific list		OUT / / VIA: IN <input checked="" type="radio"/> FedEx UPS MAIL COURIER GREYHOUND OTHER			SEND REPORT TO: herryman@brown-cald.com				STATE PROGRAM (if any): _____ E-mail? Y/N; Fax? Y/N	
					INVOICE TO: _____ (IF DIFFERENT FROM ABOVE)				DATA PACKAGE: I II III IV	
					QUOTE #: _____ PO#: _____					

Page 4 of 113

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1211E71

Date: 11-16-12 Page 4 of 6

COMPANY: Brown + Caldwell		ADDRESS: 990 Hammond Dr Ste 400 Atlanta GA 30328					ANALYSIS REQUESTED							Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers
PHONE:		FAX:					PRESERVATION (See codes)							REMARKS		
SAMPLED BY: Ryan Jones		SIGNATURE: <i>[Signature]</i>					VOC 8269									
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	#								REMARKS	
		DATE	TIME													
1	MW-21	11-14-12	0900	X		GW	X									2
2	TW-44	11-14-12	1115	X		GW	X									2
3	TW-40	11-14-12	1255	X		GW	X									2
4	TW-46	11-14-12	1625	X		GW	X									2
5	MW-24	11-14-12	1755	X		GW	X									2
6	TW-42	11-14-12	0950	X		GW	X									2
7	TW-43	11-14-12	1225	X		GW	X									2
8	DUP-111412	11-14-12	1200	X		GW	X									2
9	MW-37 Zone 1	11-14-12	1520	X		GW	X									2
10	MW-38 Zone 2	11-14-12	1727	X		GW	X									2
11	MW-38 Zone 1	11-14-12	1620	X		GW	X									2
12	EB-111412	11-14-12	1200	X		GW	X									2
13	MW-42 Zone 3	11-14-12	1330	X		GW	X									2
14	MW-42 Zone 1	11-14-12	1200	X		GW	X									2
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION							RECEIPT	
1: <i>[Signature]</i>		11-16-12 1720		1: <i>[Signature]</i>		11/16/12 5:20		PROJECT NAME: Owens Corning							Total # of Containers: 28	
2:				2:				PROJECT #: 142376							Turnaround Time Request	
3:				3:				SITE ADDRESS: Anderson, SC							<input checked="" type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other _____	
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD					INVOICE TO:							STATE PROGRAM (if any): _____		
VOC: site specific 1/59		OUT / / VIA: IN / / VIA: <input checked="" type="radio"/> CLIENT FedEx UPS MAIL COURIER <input checked="" type="radio"/> GREYHOUND OTHER _____					(IF DIFFERENT FROM ABOVE)							E-mail? Y/N; Fax? Y/N		
							QUOTE #: _____ PO#: _____							DATA PACKAGE: I II III IV		

Page 5 of 113

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
 SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order. _____

Date: 11-16-12 Page 5 of 12

COMPANY: Brown + Caldwell		ADDRESS: 990 Hammond Dr Ste 400 Atlanta GA 30328					ANALYSIS REQUESTED										Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers				
PHONE:		FAX:					PRESERVATION (See codes)																
SAMPLED BY: Ryan Jones		SIGNATURE: <i>[Signature]</i>					REMARKS																
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	VEC											REMARKS					
		DATE	TIME																				
1	MW-42 Zone 2	11-14-12	1010	X		GW	X																
2	SW-10	11-15-12	0843	X		SW	X																
3	SW-6	11-15-12	0850	X		SW	X																
4	SW-1	11-15-12	0900	X		SW	X																
5	SW-15	11-15-12	0854	X		SW	X																
6	SW-14	11-15-12	0908	X		SW	X																
7	SW-12	11-15-12	0915	X		SW	X																
8	SW-11	11-15-12	0912	X		SW	X																
9	SW-13	11-15-12	0905	X		SW	X																
10	SW-3	11-15-12	1015	X		SW	X																
11	SW-20 SW-3A	11-15-12	1020	X		SW	X																
12	DWA-11512	11-15-12	0800	X		SW	X																
13	MW-27	11-15-12	1315	X		GW	X																
14	MW-11	11-15-12	0857	X		GW	X																
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION										RECEIPT					
1: <i>[Signature]</i>		11-16-12 1720		1: <i>[Signature]</i>		11/16/12 5:12		PROJECT NAME: Owens Corning										Total # of Containers					
2:				2:				PROJECT #: 142376										Turnaround Time Request <input checked="" type="radio"/> Standard 5 Business Days <input type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other _____					
3:				3:				SITE ADDRESS: Anderson, SC															
SPECIAL INSTRUCTIONS/COMMENTS: VEC: site specific List		SHIPMENT METHOD		OUT / / VIA:		IN / / VIA:		SEND REPORT TO: <i>fberryman@brwncltd.com</i>										STATE PROGRAM (if any): _____					
		CLIENT FedEx UPS MAIL COURIER		GREYHOUND OTHER _____				INVOICE TO: (IF DIFFERENT FROM ABOVE)										E-mail? Y/N; Fax? Y/N					
								QUOTE #:										PO#:					
<p>SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.</p>																							

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Client: BROWN AND CALDWELL

Project: Owens Corning

Lab ID: 1211E71

Case Narrative

Sample "115 Elrod Road" Was listed on the COC, but not received by the lab

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, sample 1211E71-071A & -073A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Client: BROWN AND CALDWELL	Client Sample ID: MW-18
Project Name: Owens Corning	Collection Date: 11/12/2012 4:47:00 PM
Lab ID: 1211E71-001	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 16:01	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 16:01	DB
Surr: 4-Bromofluorobenzene	94.4	64.6-123		%REC	169183	1	11/19/2012 16:01	DB
Surr: Dibromofluoromethane	90.7	76.6-133		%REC	169183	1	11/19/2012 16:01	DB
Surr: Toluene-d8	93.4	77.8-120		%REC	169183	1	11/19/2012 16:01	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-35
Project Name: Owens Corning	Collection Date: 11/12/2012 2:44:00 PM
Lab ID: 1211E71-002	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 15:00	DB
1,1-Dichloroethene	170	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 15:00	DB
Surr: 4-Bromofluorobenzene	92.6	64.6-123		%REC	169183	1	11/19/2012 15:00	DB
Surr: Dibromofluoromethane	92	76.6-133		%REC	169183	1	11/19/2012 15:00	DB
Surr: Toluene-d8	92.9	77.8-120		%REC	169183	1	11/19/2012 15:00	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-1
Project Name: Owens Corning	Collection Date: 11/12/2012 4:35:00 PM
Lab ID: 1211E71-003	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 16:31	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 16:31	DB
Surr: 4-Bromofluorobenzene	89	64.6-123		%REC	169183	1	11/19/2012 16:31	DB
Surr: Dibromofluoromethane	95.2	76.6-133		%REC	169183	1	11/19/2012 16:31	DB
Surr: Toluene-d8	93.4	77.8-120		%REC	169183	1	11/19/2012 16:31	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: EB111212
Project Name: Owens Corning	Collection Date: 11/12/2012 12:00:00 PM
Lab ID: 1211E71-004	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 15:30	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 15:30	DB
Surr: 4-Bromofluorobenzene	91.1	64.6-123		%REC	169183	1	11/19/2012 15:30	DB
Surr: Dibromofluoromethane	93.8	76.6-133		%REC	169183	1	11/19/2012 15:30	DB
Surr: Toluene-d8	94.9	77.8-120		%REC	169183	1	11/19/2012 15:30	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: ALLOY
Project Name: Owens Corning	Collection Date: 11/12/2012 2:55:00 PM
Lab ID: 1211E71-005	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 17:01	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 17:01	DB
Surr: 4-Bromofluorobenzene	94.7	64.6-123		%REC	169183	1	11/19/2012 17:01	DB
Surr: Dibromofluoromethane	92.8	76.6-133		%REC	169183	1	11/19/2012 17:01	DB
Surr: Toluene-d8	91.8	77.8-120		%REC	169183	1	11/19/2012 17:01	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 628 AIRLINE RD
Project Name: Owens Corning	Collection Date: 11/12/2012 5:00:00 PM
Lab ID: 1211E71-006	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 18:37	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 18:37	DB
Surr: 4-Bromofluorobenzene	94.3	64.6-123		%REC	169183	1	11/19/2012 18:37	DB
Surr: Dibromofluoromethane	92.9	76.6-133		%REC	169183	1	11/19/2012 18:37	DB
Surr: Toluene-d8	93.8	77.8-120		%REC	169183	1	11/19/2012 18:37	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 311 KAYE DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:30:00 PM
Lab ID: 1211E71-007	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 19:07	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 19:07	DB
Surr: 4-Bromofluorobenzene	95.1	64.6-123		%REC	169183	1	11/19/2012 19:07	DB
Surr: Dibromofluoromethane	95.4	76.6-133		%REC	169183	1	11/19/2012 19:07	DB
Surr: Toluene-d8	95.5	77.8-120		%REC	169183	1	11/19/2012 19:07	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 408 CLINKSCALES ROAD
Project Name: Owens Corning	Collection Date: 11/12/2012 2:50:00 PM
Lab ID: 1211E71-008	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 19:36	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 19:36	DB
Surr: 4-Bromofluorobenzene	92.6	64.6-123		%REC	169183	1	11/19/2012 19:36	DB
Surr: Dibromofluoromethane	94.9	76.6-133		%REC	169183	1	11/19/2012 19:36	DB
Surr: Toluene-d8	94.3	77.8-120		%REC	169183	1	11/19/2012 19:36	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 605 CLINKSCALES ROAD
Project Name: Owens Corning	Collection Date: 11/12/2012 3:05:00 PM
Lab ID: 1211E71-009	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 20:07	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 20:07	DB
Surr: 4-Bromofluorobenzene	91.6	64.6-123		%REC	169183	1	11/19/2012 20:07	DB
Surr: Dibromofluoromethane	96.2	76.6-133		%REC	169183	1	11/19/2012 20:07	DB
Surr: Toluene-d8	94.6	77.8-120		%REC	169183	1	11/19/2012 20:07	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 200 FRIENDSHIP LAND
Project Name: Owens Corning	Collection Date: 11/12/2012 3:30:00 PM
Lab ID: 1211E71-010	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 20:36	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 20:36	DB
Surr: 4-Bromofluorobenzene	95	64.6-123		%REC	169183	1	11/19/2012 20:36	DB
Surr: Dibromofluoromethane	95.5	76.6-133		%REC	169183	1	11/19/2012 20:36	DB
Surr: Toluene-d8	93.4	77.8-120		%REC	169183	1	11/19/2012 20:36	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: 721 CLINKSCALES ROAD
Project Name: Owens Corning	Collection Date: 11/12/2012 3:20:00 PM
Lab ID: 1211E71-011	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 21:07	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 21:07	DB
Surr: 4-Bromofluorobenzene	92.7	64.6-123		%REC	169183	1	11/19/2012 21:07	DB
Surr: Dibromofluoromethane	102	76.6-133		%REC	169183	1	11/19/2012 21:07	DB
Surr: Toluene-d8	95	77.8-120		%REC	169183	1	11/19/2012 21:07	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: 1303 CLINKSCALES ROAD
Project Name: Owens Corning	Collection Date: 11/12/2012 3:50:00 PM
Lab ID: 1211E71-012	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 21:37	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 21:37	DB
Surr: 4-Bromofluorobenzene	95.9	64.6-123		%REC	169183	1	11/19/2012 21:37	DB
Surr: Dibromofluoromethane	99.4	76.6-133		%REC	169183	1	11/19/2012 21:37	DB
Surr: Toluene-d8	95.5	77.8-120		%REC	169183	1	11/19/2012 21:37	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 200 KAYE DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:10:00 PM
Lab ID: 1211E71-013	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 22:06	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 22:06	DB
Surr: 4-Bromofluorobenzene	98.4	64.6-123		%REC	169183	1	11/19/2012 22:06	DB
Surr: Dibromofluoromethane	98.7	76.6-133		%REC	169183	1	11/19/2012 22:06	DB
Surr: Toluene-d8	94.9	77.8-120		%REC	169183	1	11/19/2012 22:06	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: 119 CLOVERHILL DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:00:00 PM
Lab ID: 1211E71-014	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 22:36	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 22:36	DB
Surr: 4-Bromofluorobenzene	97	64.6-123		%REC	169183	1	11/19/2012 22:36	DB
Surr: Dibromofluoromethane	97.6	76.6-133		%REC	169183	1	11/19/2012 22:36	DB
Surr: Toluene-d8	94.6	77.8-120		%REC	169183	1	11/19/2012 22:36	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: DUP-111212
Project Name: Owens Corning	Collection Date: 11/12/2012 12:00:00 PM
Lab ID: 1211E71-015	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/19/2012 23:37	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Benzene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Toluene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/19/2012 23:37	DB
Surr: 4-Bromofluorobenzene	97.2	64.6-123		%REC	169183	1	11/19/2012 23:37	DB
Surr: Dibromofluoromethane	97	76.6-133		%REC	169183	1	11/19/2012 23:37	DB
Surr: Toluene-d8	93.5	77.8-120		%REC	169183	1	11/19/2012 23:37	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 303 KAYE DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:20:00 PM
Lab ID: 1211E71-016	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/20/2012 07:29	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Benzene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Toluene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/20/2012 07:29	DB
Surr: 4-Bromofluorobenzene	96.4	64.6-123		%REC	169183	1	11/20/2012 07:29	DB
Surr: Dibromofluoromethane	98.7	76.6-133		%REC	169183	1	11/20/2012 07:29	DB
Surr: Toluene-d8	94.6	77.8-120		%REC	169183	1	11/20/2012 07:29	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 412 KAYE DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:40:00 PM
Lab ID: 1211E71-017	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/20/2012 07:59	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Benzene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Toluene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/20/2012 07:59	DB
Surr: 4-Bromofluorobenzene	96	64.6-123		%REC	169183	1	11/20/2012 07:59	DB
Surr: Dibromofluoromethane	102	76.6-133		%REC	169183	1	11/20/2012 07:59	DB
Surr: Toluene-d8	95.1	77.8-120		%REC	169183	1	11/20/2012 07:59	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: 117 FAYE DRIVE
Project Name: Owens Corning	Collection Date: 11/12/2012 4:50:00 PM
Lab ID: 1211E71-018	Matrix: Drinking Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/20/2012 08:29	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Benzene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Toluene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/20/2012 08:29	DB
Surr: 4-Bromofluorobenzene	95.9	64.6-123		%REC	169183	1	11/20/2012 08:29	DB
Surr: Dibromofluoromethane	103	76.6-133		%REC	169183	1	11/20/2012 08:29	DB
Surr: Toluene-d8	98.1	77.8-120		%REC	169183	1	11/20/2012 08:29	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE 3
Project Name: Owens Corning	Collection Date: 11/12/2012 6:20:00 PM
Lab ID: 1211E71-020	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/20/2012 08:59	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Benzene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Toluene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/20/2012 08:59	DB
Surr: 4-Bromofluorobenzene	94.1	64.6-123		%REC	169183	1	11/20/2012 08:59	DB
Surr: Dibromofluoromethane	101	76.6-133		%REC	169183	1	11/20/2012 08:59	DB
Surr: Toluene-d8	96.4	77.8-120		%REC	169183	1	11/20/2012 08:59	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-6
Project Name: Owens Corning	Collection Date: 11/13/2012 6:10:00 PM
Lab ID: 1211E71-021	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169183	1	11/20/2012 09:29	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Methylene chloride	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Chloroform	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
1,1,1-Trichloroethane	16	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Carbon tetrachloride	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Benzene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Trichloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Toluene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Tetrachloroethene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Ethylbenzene	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Xylenes, Total	BRL	5.0		ug/L	169183	1	11/20/2012 09:29	DB
Surr: 4-Bromofluorobenzene	94.7	64.6-123		%REC	169183	1	11/20/2012 09:29	DB
Surr: Dibromofluoromethane	105	76.6-133		%REC	169183	1	11/20/2012 09:29	DB
Surr: Toluene-d8	97	77.8-120		%REC	169183	1	11/20/2012 09:29	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-9
Project Name: Owens Corning	Collection Date: 11/13/2012 5:44:00 PM
Lab ID: 1211E71-022	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 13:13	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 13:13	GK
Surr: 4-Bromofluorobenzene	85.3	64.6-123		%REC	169184	1	11/19/2012 13:13	GK
Surr: Dibromofluoromethane	98.9	76.6-133		%REC	169184	1	11/19/2012 13:13	GK
Surr: Toluene-d8	87.5	77.8-120		%REC	169184	1	11/19/2012 13:13	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-2
Project Name: Owens Corning	Collection Date: 11/13/2012 10:45:00 AM
Lab ID: 1211E71-023	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 13:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 13:38	GK
Surr: 4-Bromofluorobenzene	84.6	64.6-123		%REC	169184	1	11/19/2012 13:38	GK
Surr: Dibromofluoromethane	98.7	76.6-133		%REC	169184	1	11/19/2012 13:38	GK
Surr: Toluene-d8	88.8	77.8-120		%REC	169184	1	11/19/2012 13:38	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: EB-111312
Project Name: Owens Corning	Collection Date: 11/13/2012 8:00:00 AM
Lab ID: 1211E71-024	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 14:55	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 14:55	GK
Surr: 4-Bromofluorobenzene	86.4	64.6-123		%REC	169184	1	11/19/2012 14:55	GK
Surr: Dibromofluoromethane	99.3	76.6-133		%REC	169184	1	11/19/2012 14:55	GK
Surr: Toluene-d8	89.2	77.8-120		%REC	169184	1	11/19/2012 14:55	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-4
Project Name: Owens Corning	Collection Date: 11/13/2012
Lab ID: 1211E71-025	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 15:20	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 15:20	GK
Surr: 4-Bromofluorobenzene	85.9	64.6-123		%REC	169184	1	11/19/2012 15:20	GK
Surr: Dibromofluoromethane	98	76.6-133		%REC	169184	1	11/19/2012 15:20	GK
Surr: Toluene-d8	88.5	77.8-120		%REC	169184	1	11/19/2012 15:20	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-5
Project Name: Owens Corning	Collection Date: 11/13/2012 4:07:00 PM
Lab ID: 1211E71-026	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 15:45	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 15:45	GK
Surr: 4-Bromofluorobenzene	85.1	64.6-123		%REC	169184	1	11/19/2012 15:45	GK
Surr: Dibromofluoromethane	98.9	76.6-133		%REC	169184	1	11/19/2012 15:45	GK
Surr: Toluene-d8	88.4	77.8-120		%REC	169184	1	11/19/2012 15:45	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-17
Project Name: Owens Corning	Collection Date: 11/13/2012 9:45:00 AM
Lab ID: 1211E71-027	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 16:11	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Trichloroethene	6.5	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 16:11	GK
Surr: 4-Bromofluorobenzene	83.2	64.6-123		%REC	169184	1	11/19/2012 16:11	GK
Surr: Dibromofluoromethane	97.8	76.6-133		%REC	169184	1	11/19/2012 16:11	GK
Surr: Toluene-d8	88.9	77.8-120		%REC	169184	1	11/19/2012 16:11	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: DUP-111312
Project Name: Owens Corning	Collection Date: 11/13/2012 8:00:00 AM
Lab ID: 1211E71-028	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 16:36	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Trichloroethene	6.5	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 16:36	GK
Surr: 4-Bromofluorobenzene	84.2	64.6-123		%REC	169184	1	11/19/2012 16:36	GK
Surr: Dibromofluoromethane	100	76.6-133		%REC	169184	1	11/19/2012 16:36	GK
Surr: Toluene-d8	89.4	77.8-120		%REC	169184	1	11/19/2012 16:36	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-10
Project Name: Owens Corning	Collection Date: 11/13/2012 11:15:00 AM
Lab ID: 1211E71-029	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 17:01	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 17:01	GK
Surr: 4-Bromofluorobenzene	82.1	64.6-123		%REC	169184	1	11/19/2012 17:01	GK
Surr: Dibromofluoromethane	103	76.6-133		%REC	169184	1	11/19/2012 17:01	GK
Surr: Toluene-d8	90.1	77.8-120		%REC	169184	1	11/19/2012 17:01	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-14
Project Name: Owens Corning	Collection Date: 11/13/2012 12:45:00 PM
Lab ID: 1211E71-030	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 17:26	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 17:26	GK
Surr: 4-Bromofluorobenzene	83.2	64.6-123		%REC	169184	1	11/19/2012 17:26	GK
Surr: Dibromofluoromethane	99.7	76.6-133		%REC	169184	1	11/19/2012 17:26	GK
Surr: Toluene-d8	90.3	77.8-120		%REC	169184	1	11/19/2012 17:26	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-3
Project Name: Owens Corning	Collection Date: 11/13/2012 2:50:00 PM
Lab ID: 1211E71-031	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 17:52	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 17:52	GK
Surr: 4-Bromofluorobenzene	84.5	64.6-123		%REC	169184	1	11/19/2012 17:52	GK
Surr: Dibromofluoromethane	103	76.6-133		%REC	169184	1	11/19/2012 17:52	GK
Surr: Toluene-d8	91.5	77.8-120		%REC	169184	1	11/19/2012 17:52	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-16
Project Name: Owens Corning	Collection Date: 11/13/2012 4:35:00 PM
Lab ID: 1211E71-032	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 18:17	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 18:17	GK
Surr: 4-Bromofluorobenzene	84.6	64.6-123		%REC	169184	1	11/19/2012 18:17	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169184	1	11/19/2012 18:17	GK
Surr: Toluene-d8	90.4	77.8-120		%REC	169184	1	11/19/2012 18:17	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE3
Project Name: Owens Corning	Collection Date: 11/13/2012 2:05:00 PM
Lab ID: 1211E71-033	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 18:42	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 18:42	GK
Surr: 4-Bromofluorobenzene	84.5	64.6-123		%REC	169184	1	11/19/2012 18:42	GK
Surr: Dibromofluoromethane	103	76.6-133		%REC	169184	1	11/19/2012 18:42	GK
Surr: Toluene-d8	90.8	77.8-120		%REC	169184	1	11/19/2012 18:42	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE1
Project Name: Owens Corning	Collection Date: 11/13/2012 5:10:00 PM
Lab ID: 1211E71-034	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 19:07	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 19:07	GK
Surr: 4-Bromofluorobenzene	83.1	64.6-123		%REC	169184	1	11/19/2012 19:07	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169184	1	11/19/2012 19:07	GK
Surr: Toluene-d8	90.3	77.8-120		%REC	169184	1	11/19/2012 19:07	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: MW-43 ZONE2
Project Name: Owens Corning	Collection Date: 11/13/2012 5:40:00 PM
Lab ID: 1211E71-035	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 19:32	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 19:32	GK
Surr: 4-Bromofluorobenzene	83.3	64.6-123		%REC	169184	1	11/19/2012 19:32	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169184	1	11/19/2012 19:32	GK
Surr: Toluene-d8	91.3	77.8-120		%REC	169184	1	11/19/2012 19:32	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE2
Project Name: Owens Corning	Collection Date: 11/13/2012 3:32:00 PM
Lab ID: 1211E71-036	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 19:58	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 19:58	GK
Surr: 4-Bromofluorobenzene	85.1	64.6-123		%REC	169184	1	11/19/2012 19:58	GK
Surr: Dibromofluoromethane	104	76.6-133		%REC	169184	1	11/19/2012 19:58	GK
Surr: Toluene-d8	90.5	77.8-120		%REC	169184	1	11/19/2012 19:58	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE3
Project Name: Owens Corning	Collection Date: 11/13/2012 2:00:00 PM
Lab ID: 1211E71-037	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 20:23	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 20:23	GK
Surr: 4-Bromofluorobenzene	83	64.6-123		%REC	169184	1	11/19/2012 20:23	GK
Surr: Dibromofluoromethane	104	76.6-133		%REC	169184	1	11/19/2012 20:23	GK
Surr: Toluene-d8	92	77.8-120		%REC	169184	1	11/19/2012 20:23	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-39 ZONE1
Project Name: Owens Corning	Collection Date: 11/13/2012 12:25:00 PM
Lab ID: 1211E71-038	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 20:48	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 20:48	GK
Surr: 4-Bromofluorobenzene	81.6	64.6-123		%REC	169184	1	11/19/2012 20:48	GK
Surr: Dibromofluoromethane	104	76.6-133		%REC	169184	1	11/19/2012 20:48	GK
Surr: Toluene-d8	91.4	77.8-120		%REC	169184	1	11/19/2012 20:48	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-25
Project Name: Owens Corning	Collection Date: 11/14/2012 9:04:00 AM
Lab ID: 1211E71-039	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 21:13	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 21:13	GK
Surr: 4-Bromofluorobenzene	82.7	64.6-123		%REC	169184	1	11/19/2012 21:13	GK
Surr: Dibromofluoromethane	103	76.6-133		%REC	169184	1	11/19/2012 21:13	GK
Surr: Toluene-d8	92.2	77.8-120		%REC	169184	1	11/19/2012 21:13	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-26
Project Name: Owens Corning	Collection Date: 11/14/2012 12:16:00 PM
Lab ID: 1211E71-040	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 21:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 21:38	GK
Surr: 4-Bromofluorobenzene	82.8	64.6-123		%REC	169184	1	11/19/2012 21:38	GK
Surr: Dibromofluoromethane	105	76.6-133		%REC	169184	1	11/19/2012 21:38	GK
Surr: Toluene-d8	91.8	77.8-120		%REC	169184	1	11/19/2012 21:38	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-32
Project Name: Owens Corning	Collection Date: 11/14/2012 5:10:00 PM
Lab ID: 1211E71-041	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169184	1	11/19/2012 22:29	GK
1,1-Dichloroethene	29	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Methylene chloride	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
1,1-Dichloroethane	9.0	5.0		ug/L	169184	1	11/19/2012 22:29	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Chloroform	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
1,1,1-Trichloroethane	16	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Carbon tetrachloride	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Benzene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Trichloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Toluene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Tetrachloroethene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Ethylbenzene	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Xylenes, Total	BRL	5.0		ug/L	169184	1	11/19/2012 22:29	GK
Surr: 4-Bromofluorobenzene	83.5	64.6-123		%REC	169184	1	11/19/2012 22:29	GK
Surr: Dibromofluoromethane	108	76.6-133		%REC	169184	1	11/19/2012 22:29	GK
Surr: Toluene-d8	91	77.8-120		%REC	169184	1	11/19/2012 22:29	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TW-41
Project Name: Owens Corning	Collection Date: 11/14/2012 2:38:00 PM
Lab ID: 1211E71-042	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 16:34	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 16:34	GK
Surr: 4-Bromofluorobenzene	84.4	64.6-123		%REC	169247	1	11/20/2012 16:34	GK
Surr: Dibromofluoromethane	105	76.6-133		%REC	169247	1	11/20/2012 16:34	GK
Surr: Toluene-d8	92.8	77.8-120		%REC	169247	1	11/20/2012 16:34	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-21
Project Name: Owens Corning	Collection Date: 11/14/2012 9:00:00 AM
Lab ID: 1211E71-043	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 17:25	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 17:25	GK
Surr: 4-Bromofluorobenzene	83.4	64.6-123		%REC	169247	1	11/20/2012 17:25	GK
Surr: Dibromofluoromethane	105	76.6-133		%REC	169247	1	11/20/2012 17:25	GK
Surr: Toluene-d8	93.4	77.8-120		%REC	169247	1	11/20/2012 17:25	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TW-44
Project Name: Owens Corning	Collection Date: 11/14/2012 11:15:00 AM
Lab ID: 1211E71-044	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 17:50	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 17:50	GK
Surr: 4-Bromofluorobenzene	84.2	64.6-123		%REC	169247	1	11/20/2012 17:50	GK
Surr: Dibromofluoromethane	104	76.6-133		%REC	169247	1	11/20/2012 17:50	GK
Surr: Toluene-d8	92.2	77.8-120		%REC	169247	1	11/20/2012 17:50	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TW-40
Project Name: Owens Corning	Collection Date: 11/14/2012 12:55:00 PM
Lab ID: 1211E71-045	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 18:16	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 18:16	GK
Surr: 4-Bromofluorobenzene	83.1	64.6-123		%REC	169247	1	11/20/2012 18:16	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169247	1	11/20/2012 18:16	GK
Surr: Toluene-d8	90.2	77.8-120		%REC	169247	1	11/20/2012 18:16	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TW-46
Project Name: Owens Corning	Collection Date: 11/14/2012 4:25:00 PM
Lab ID: 1211E71-046	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 18:41	GK
1,1-Dichloroethene	28	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Chloroform	11	5.0		ug/L	169247	1	11/20/2012 18:41	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Carbon tetrachloride	6.3	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 18:41	GK
Surr: 4-Bromofluorobenzene	82.1	64.6-123		%REC	169247	1	11/20/2012 18:41	GK
Surr: Dibromofluoromethane	104	76.6-133		%REC	169247	1	11/20/2012 18:41	GK
Surr: Toluene-d8	91.6	77.8-120		%REC	169247	1	11/20/2012 18:41	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-24
Project Name: Owens Corning	Collection Date: 11/14/2012 5:55:00 PM
Lab ID: 1211E71-047	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 19:06	GK
1,1-Dichloroethene	190	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Chloroform	15	5.0		ug/L	169247	1	11/20/2012 19:06	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Carbon tetrachloride	15	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 19:06	GK
Surr: 4-Bromofluorobenzene	82	64.6-123		%REC	169247	1	11/20/2012 19:06	GK
Surr: Dibromofluoromethane	106	76.6-133		%REC	169247	1	11/20/2012 19:06	GK
Surr: Toluene-d8	92.1	77.8-120		%REC	169247	1	11/20/2012 19:06	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: TW-42
Project Name: Owens Corning	Collection Date: 11/14/2012 9:50:00 AM
Lab ID: 1211E71-048	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 19:31	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 19:31	GK
Surr: 4-Bromofluorobenzene	82.1	64.6-123		%REC	169247	1	11/20/2012 19:31	GK
Surr: Dibromofluoromethane	105	76.6-133		%REC	169247	1	11/20/2012 19:31	GK
Surr: Toluene-d8	91.5	77.8-120		%REC	169247	1	11/20/2012 19:31	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TW-43
Project Name: Owens Corning	Collection Date: 11/14/2012 12:25:00 PM
Lab ID: 1211E71-049	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 19:57	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 19:57	GK
Surr: 4-Bromofluorobenzene	81.9	64.6-123		%REC	169247	1	11/20/2012 19:57	GK
Surr: Dibromofluoromethane	106	76.6-133		%REC	169247	1	11/20/2012 19:57	GK
Surr: Toluene-d8	94.4	77.8-120		%REC	169247	1	11/20/2012 19:57	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: DUP-111412
Project Name: Owens Corning	Collection Date: 11/14/2012 12:00:00 PM
Lab ID: 1211E71-050	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 20:22	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 20:22	GK
Surr: 4-Bromofluorobenzene	81.7	64.6-123		%REC	169247	1	11/20/2012 20:22	GK
Surr: Dibromofluoromethane	107	76.6-133		%REC	169247	1	11/20/2012 20:22	GK
Surr: Toluene-d8	93.5	77.8-120		%REC	169247	1	11/20/2012 20:22	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE1
Project Name: Owens Corning	Collection Date: 11/14/2012 3:20:00 PM
Lab ID: 1211E71-051	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 22:03	GK
1,1-Dichloroethene	91	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 22:03	GK
Surr: 4-Bromofluorobenzene	83.4	64.6-123		%REC	169247	1	11/20/2012 22:03	GK
Surr: Dibromofluoromethane	110	76.6-133		%REC	169247	1	11/20/2012 22:03	GK
Surr: Toluene-d8	91	77.8-120		%REC	169247	1	11/20/2012 22:03	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-38 ZONE2
Project Name: Owens Corning	Collection Date: 11/14/2012 5:27:00 PM
Lab ID: 1211E71-052	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 20:47	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 20:47	GK
Surr: 4-Bromofluorobenzene	81.3	64.6-123		%REC	169247	1	11/20/2012 20:47	GK
Surr: Dibromofluoromethane	105	76.6-133		%REC	169247	1	11/20/2012 20:47	GK
Surr: Toluene-d8	93.1	77.8-120		%REC	169247	1	11/20/2012 20:47	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-38 ZONE1
Project Name: Owens Corning	Collection Date: 11/14/2012 4:20:00 PM
Lab ID: 1211E71-053	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 22:28	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 22:28	GK
Surr: 4-Bromofluorobenzene	82.6	64.6-123		%REC	169247	1	11/20/2012 22:28	GK
Surr: Dibromofluoromethane	108	76.6-133		%REC	169247	1	11/20/2012 22:28	GK
Surr: Toluene-d8	91.3	77.8-120		%REC	169247	1	11/20/2012 22:28	GK

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: EB-111412
Project Name: Owens Corning	Collection Date: 11/14/2012 12:00:00 PM
Lab ID: 1211E71-054	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 21:12	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 21:12	GK
Surr: 4-Bromofluorobenzene	83.3	64.6-123		%REC	169247	1	11/20/2012 21:12	GK
Surr: Dibromofluoromethane	108	76.6-133		%REC	169247	1	11/20/2012 21:12	GK
Surr: Toluene-d8	93	77.8-120		%REC	169247	1	11/20/2012 21:12	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE3
Project Name: Owens Corning	Collection Date: 11/14/2012 1:30:00 PM
Lab ID: 1211E71-055	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 22:53	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 22:53	GK
Surr: 4-Bromofluorobenzene	81.4	64.6-123		%REC	169247	1	11/20/2012 22:53	GK
Surr: Dibromofluoromethane	106	76.6-133		%REC	169247	1	11/20/2012 22:53	GK
Surr: Toluene-d8	92.8	77.8-120		%REC	169247	1	11/20/2012 22:53	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE1
Project Name: Owens Corning	Collection Date: 11/14/2012 12:00:00 PM
Lab ID: 1211E71-056	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 21:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 21:38	GK
Surr: 4-Bromofluorobenzene	82.2	64.6-123		%REC	169247	1	11/20/2012 21:38	GK
Surr: Dibromofluoromethane	109	76.6-133		%REC	169247	1	11/20/2012 21:38	GK
Surr: Toluene-d8	92.7	77.8-120		%REC	169247	1	11/20/2012 21:38	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: MW-42 ZONE2
Project Name: Owens Corning	Collection Date: 11/14/2012 10:10:00 AM
Lab ID: 1211E71-057	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 21:18	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 21:18	DB
Surr: 4-Bromofluorobenzene	93.9	64.6-123		%REC	169247	1	11/20/2012 21:18	DB
Surr: Dibromofluoromethane	98.5	76.6-133		%REC	169247	1	11/20/2012 21:18	DB
Surr: Toluene-d8	94.4	77.8-120		%REC	169247	1	11/20/2012 21:18	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-10
Project Name: Owens Corning	Collection Date: 11/15/2012 8:43:00 AM
Lab ID: 1211E71-058	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 19:18	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 19:18	DB
Surr: 4-Bromofluorobenzene	97	64.6-123		%REC	169247	1	11/20/2012 19:18	DB
Surr: Dibromofluoromethane	99.1	76.6-133		%REC	169247	1	11/20/2012 19:18	DB
Surr: Toluene-d8	92.3	77.8-120		%REC	169247	1	11/20/2012 19:18	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-6
Project Name: Owens Corning	Collection Date: 11/15/2012 8:50:00 AM
Lab ID: 1211E71-059	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 19:48	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 19:48	DB
Surr: 4-Bromofluorobenzene	95.6	64.6-123		%REC	169247	1	11/20/2012 19:48	DB
Surr: Dibromofluoromethane	99.1	76.6-133		%REC	169247	1	11/20/2012 19:48	DB
Surr: Toluene-d8	93.3	77.8-120		%REC	169247	1	11/20/2012 19:48	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-1
Project Name: Owens Corning	Collection Date: 11/15/2012 9:00:00 AM
Lab ID: 1211E71-060	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 20:18	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 20:18	DB
Surr: 4-Bromofluorobenzene	97.1	64.6-123		%REC	169247	1	11/20/2012 20:18	DB
Surr: Dibromofluoromethane	98	76.6-133		%REC	169247	1	11/20/2012 20:18	DB
Surr: Toluene-d8	93.5	77.8-120		%REC	169247	1	11/20/2012 20:18	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-15
Project Name: Owens Corning	Collection Date: 11/15/2012 8:54:00 AM
Lab ID: 1211E71-061	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169247	1	11/20/2012 20:48	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Methylene chloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Chloroform	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Carbon tetrachloride	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Benzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Trichloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Toluene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Tetrachloroethene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Ethylbenzene	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Xylenes, Total	BRL	5.0		ug/L	169247	1	11/20/2012 20:48	DB
Surr: 4-Bromofluorobenzene	95.2	64.6-123		%REC	169247	1	11/20/2012 20:48	DB
Surr: Dibromofluoromethane	96.6	76.6-133		%REC	169247	1	11/20/2012 20:48	DB
Surr: Toluene-d8	95.2	77.8-120		%REC	169247	1	11/20/2012 20:48	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-14
Project Name: Owens Corning	Collection Date: 11/15/2012 9:08:00 AM
Lab ID: 1211E71-062	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 04:28	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 04:28	JT
Surr: 4-Bromofluorobenzene	77.7	64.6-123		%REC	169199	1	11/20/2012 04:28	JT
Surr: Dibromofluoromethane	97	76.6-133		%REC	169199	1	11/20/2012 04:28	JT
Surr: Toluene-d8	88.9	77.8-120		%REC	169199	1	11/20/2012 04:28	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-12
Project Name: Owens Corning	Collection Date: 11/15/2012 9:15:00 AM
Lab ID: 1211E71-063	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 04:58	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 04:58	JT
Surr: 4-Bromofluorobenzene	78.1	64.6-123		%REC	169199	1	11/20/2012 04:58	JT
Surr: Dibromofluoromethane	103	76.6-133		%REC	169199	1	11/20/2012 04:58	JT
Surr: Toluene-d8	89.3	77.8-120		%REC	169199	1	11/20/2012 04:58	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: SW-11
Project Name: Owens Corning	Collection Date: 11/15/2012 9:12:00 AM
Lab ID: 1211E71-064	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 05:28	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 05:28	JT
Surr: 4-Bromofluorobenzene	79.7	64.6-123		%REC	169199	1	11/20/2012 05:28	JT
Surr: Dibromofluoromethane	98.8	76.6-133		%REC	169199	1	11/20/2012 05:28	JT
Surr: Toluene-d8	88.8	77.8-120		%REC	169199	1	11/20/2012 05:28	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-13
Project Name: Owens Corning	Collection Date: 11/15/2012 9:05:00 AM
Lab ID: 1211E71-065	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 05:57	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 05:57	JT
Surr: 4-Bromofluorobenzene	78.3	64.6-123		%REC	169199	1	11/20/2012 05:57	JT
Surr: Dibromofluoromethane	103	76.6-133		%REC	169199	1	11/20/2012 05:57	JT
Surr: Toluene-d8	90.5	77.8-120		%REC	169199	1	11/20/2012 05:57	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-3
Project Name: Owens Corning	Collection Date: 11/15/2012 10:15:00 AM
Lab ID: 1211E71-066	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 12:21	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 12:21	GK
Surr: 4-Bromofluorobenzene	84	64.6-123		%REC	169199	1	11/20/2012 12:21	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169199	1	11/20/2012 12:21	GK
Surr: Toluene-d8	88.6	77.8-120		%REC	169199	1	11/20/2012 12:21	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: SW-3A
Project Name: Owens Corning	Collection Date: 11/15/2012 10:20:00 AM
Lab ID: 1211E71-067	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 12:46	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 12:46	GK
Surr: 4-Bromofluorobenzene	83.4	64.6-123		%REC	169199	1	11/20/2012 12:46	GK
Surr: Dibromofluoromethane	99.9	76.6-133		%REC	169199	1	11/20/2012 12:46	GK
Surr: Toluene-d8	90	77.8-120		%REC	169199	1	11/20/2012 12:46	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: DUP-111512
Project Name: Owens Corning	Collection Date: 11/15/2012 8:00:00 AM
Lab ID: 1211E71-068	Matrix: Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 07:26	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 07:26	JT
Surr: 4-Bromofluorobenzene	77.1	64.6-123		%REC	169199	1	11/20/2012 07:26	JT
Surr: Dibromofluoromethane	100	76.6-133		%REC	169199	1	11/20/2012 07:26	JT
Surr: Toluene-d8	88.7	77.8-120		%REC	169199	1	11/20/2012 07:26	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-27
Project Name: Owens Corning	Collection Date: 11/15/2012 1:15:00 PM
Lab ID: 1211E71-069	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)				
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 07:56	JT
1,1-Dichloroethene	67	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Chloroform	7.9	5.0		ug/L	169199	1	11/20/2012 07:56	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Carbon tetrachloride	7.1	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 07:56	JT
Surr: 4-Bromofluorobenzene	76.9	64.6-123		%REC	169199	1	11/20/2012 07:56	JT
Surr: Dibromofluoromethane	101	76.6-133		%REC	169199	1	11/20/2012 07:56	JT
Surr: Toluene-d8	88.6	77.8-120		%REC	169199	1	11/20/2012 07:56	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: MW-11
Project Name: Owens Corning	Collection Date: 11/15/2012 8:57:00 AM
Lab ID: 1211E71-070	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	8.7	2.0		ug/L	169199	1	11/20/2012 08:26	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 08:26	JT
Surr: 4-Bromofluorobenzene	78.2	64.6-123		%REC	169199	1	11/20/2012 08:26	JT
Surr: Dibromofluoromethane	101	76.6-133		%REC	169199	1	11/20/2012 08:26	JT
Surr: Toluene-d8	89.3	77.8-120		%REC	169199	1	11/20/2012 08:26	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: MW-28
Project Name: Owens Corning	Collection Date: 11/16/2012 1:02:00 PM
Lab ID: 1211E71-071	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2000		ug/L	169199	1000	11/20/2012 17:03	JT
1,1-Dichloroethene	140000	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Methylene chloride	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
trans-1,2-Dichloroethene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
1,1-Dichloroethane	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
cis-1,2-Dichloroethene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Chloroform	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
1,1,1-Trichloroethane	140000	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Carbon tetrachloride	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Benzene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
1,2-Dichloroethane	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Trichloroethene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Toluene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Tetrachloroethene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Ethylbenzene	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Xylenes, Total	BRL	5000		ug/L	169199	1000	11/20/2012 17:03	JT
Surr: 4-Bromofluorobenzene	87.3	64.6-123		%REC	169199	1000	11/20/2012 17:03	JT
Surr: Dibromofluoromethane	94	76.6-133		%REC	169199	1000	11/20/2012 17:03	JT
Surr: Toluene-d8	85.6	77.8-120		%REC	169199	1000	11/20/2012 17:03	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-30
Project Name: Owens Corning	Collection Date: 11/16/2012 11:30:00 AM
Lab ID: 1211E71-072	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 19:31	JT
1,1-Dichloroethene	4000	250		ug/L	169199	50	11/20/2012 01:31	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
1,1-Dichloroethane	14	5.0		ug/L	169199	1	11/20/2012 19:31	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Chloroform	5.2	5.0		ug/L	169199	1	11/20/2012 19:31	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Carbon tetrachloride	150	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
1,2-Dichloroethane	21	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 19:31	JT
Surr: 4-Bromofluorobenzene	84.8	64.6-123		%REC	169199	50	11/20/2012 01:31	JT
Surr: 4-Bromofluorobenzene	90.7	64.6-123		%REC	169199	1	11/20/2012 19:31	JT
Surr: Dibromofluoromethane	92.6	76.6-133		%REC	169199	50	11/20/2012 01:31	JT
Surr: Dibromofluoromethane	93	76.6-133		%REC	169199	1	11/20/2012 19:31	JT
Surr: Toluene-d8	85.3	77.8-120		%REC	169199	50	11/20/2012 01:31	JT
Surr: Toluene-d8	90.8	77.8-120		%REC	169199	1	11/20/2012 19:31	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-7
Project Name: Owens Corning	Collection Date: 11/16/2012 11:20:00 AM
Lab ID: 1211E71-073	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	1000		ug/L	169199	500	11/20/2012 01:01	JT
1,1-Dichloroethene	48000	2500		ug/L	169199	500	11/20/2012 01:01	JT
Methylene chloride	2800	2500		ug/L	169199	500	11/20/2012 01:01	JT
trans-1,2-Dichloroethene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
1,1-Dichloroethane	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
cis-1,2-Dichloroethene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Chloroform	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
1,1,1-Trichloroethane	42000	2500		ug/L	169199	500	11/20/2012 01:01	JT
Carbon tetrachloride	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Benzene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
1,2-Dichloroethane	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Trichloroethene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Toluene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Tetrachloroethene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Ethylbenzene	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Xylenes, Total	BRL	2500		ug/L	169199	500	11/20/2012 01:01	JT
Surr: 4-Bromofluorobenzene	88.3	64.6-123		%REC	169199	500	11/20/2012 01:01	JT
Surr: Dibromofluoromethane	98.6	76.6-133		%REC	169199	500	11/20/2012 01:01	JT
Surr: Toluene-d8	88.5	77.8-120		%REC	169199	500	11/20/2012 01:01	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-31
Project Name: Owens Corning	Collection Date: 11/16/2012 9:10:00 AM
Lab ID: 1211E71-074	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 20:01	JT
1,1-Dichloroethene	1800	50		ug/L	169199	10	11/20/2012 18:03	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
1,1-Dichloroethane	6.7	5.0		ug/L	169199	1	11/20/2012 20:01	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Carbon tetrachloride	21	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
1,2-Dichloroethane	9.4	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 20:01	JT
Surr: 4-Bromofluorobenzene	82.2	64.6-123		%REC	169199	1	11/20/2012 20:01	JT
Surr: 4-Bromofluorobenzene	87.2	64.6-123		%REC	169199	10	11/20/2012 18:03	JT
Surr: Dibromofluoromethane	92.1	76.6-133		%REC	169199	10	11/20/2012 18:03	JT
Surr: Dibromofluoromethane	95.3	76.6-133		%REC	169199	1	11/20/2012 20:01	JT
Surr: Toluene-d8	85.2	77.8-120		%REC	169199	1	11/20/2012 20:01	JT
Surr: Toluene-d8	84.8	77.8-120		%REC	169199	10	11/20/2012 18:03	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE3
Project Name: Owens Corning	Collection Date: 11/16/2012 1:35:00 PM
Lab ID: 1211E71-075	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 13:12	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 13:12	GK
Surr: 4-Bromofluorobenzene	85.2	64.6-123		%REC	169199	1	11/20/2012 13:12	GK
Surr: Dibromofluoromethane	102	76.6-133		%REC	169199	1	11/20/2012 13:12	GK
Surr: Toluene-d8	90.5	77.8-120		%REC	169199	1	11/20/2012 13:12	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 26-Nov-12

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE5
Project Name: Owens Corning	Collection Date: 11/16/2012 1:05:00 PM
Lab ID: 1211E71-076	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 09:54	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 09:54	JT
Surr: 4-Bromofluorobenzene	84.6	64.6-123		%REC	169199	1	11/20/2012 09:54	JT
Surr: Dibromofluoromethane	104	76.6-133		%REC	169199	1	11/20/2012 09:54	JT
Surr: Toluene-d8	92.2	77.8-120		%REC	169199	1	11/20/2012 09:54	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TB-1
Project Name: Owens Corning	Collection Date: 11/16/2012
Lab ID: 1211E71-077	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 02:30	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 02:30	JT
Surr: 4-Bromofluorobenzene	81.5	64.6-123		%REC	169199	1	11/20/2012 02:30	JT
Surr: Dibromofluoromethane	98.7	76.6-133		%REC	169199	1	11/20/2012 02:30	JT
Surr: Toluene-d8	89.1	77.8-120		%REC	169199	1	11/20/2012 02:30	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TB-2
Project Name: Owens Corning	Collection Date: 11/16/2012
Lab ID: 1211E71-078	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 02:59	JT
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 02:59	JT
Surr: 4-Bromofluorobenzene	79.5	64.6-123		%REC	169199	1	11/20/2012 02:59	JT
Surr: Dibromofluoromethane	99.5	76.6-133		%REC	169199	1	11/20/2012 02:59	JT
Surr: Toluene-d8	88.3	77.8-120		%REC	169199	1	11/20/2012 02:59	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TB-3
Project Name: Owens Corning	Collection Date: 11/16/2012
Lab ID: 1211E71-079	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 13:37	GK
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Chloroform	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 13:37	GK
Surr: 4-Bromofluorobenzene	83.5	64.6-123		%REC	169199	1	11/20/2012 13:37	GK
Surr: Dibromofluoromethane	101	76.6-133		%REC	169199	1	11/20/2012 13:37	GK
Surr: Toluene-d8	91.2	77.8-120		%REC	169199	1	11/20/2012 13:37	GK

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: TB-4
Project Name: Owens Corning	Collection Date: 11/16/2012
Lab ID: 1211E71-080	Matrix: Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/21/2012 12:04	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Methylene chloride	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Chloroform	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Carbon tetrachloride	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Benzene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Trichloroethene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Toluene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/21/2012 12:04	DB
Surr: 4-Bromofluorobenzene	98	64.6-123		%REC	169199	1	11/21/2012 12:04	DB
Surr: Dibromofluoromethane	106	76.6-133		%REC	169199	1	11/21/2012 12:04	DB
Surr: Toluene-d8	95.2	77.8-120		%REC	169199	1	11/21/2012 12:04	DB

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-20
Project Name: Owens Corning	Collection Date: 11/15/2012 4:56:00 PM
Lab ID: 1211E71-081	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169199	1	11/20/2012 08:55	JT
1,1-Dichloroethene	290	50		ug/L	169199	10	11/20/2012 18:32	JT
Methylene chloride	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
1,1-Dichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Chloroform	31	5.0		ug/L	169199	1	11/20/2012 08:55	JT
1,1,1-Trichloroethane	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Carbon tetrachloride	84	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Benzene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
1,2-Dichloroethane	14	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Trichloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Toluene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Tetrachloroethene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Ethylbenzene	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Xylenes, Total	BRL	5.0		ug/L	169199	1	11/20/2012 08:55	JT
Surr: 4-Bromofluorobenzene	79.7	64.6-123		%REC	169199	1	11/20/2012 08:55	JT
Surr: 4-Bromofluorobenzene	94.1	64.6-123		%REC	169199	10	11/20/2012 18:32	JT
Surr: Dibromofluoromethane	94.3	76.6-133		%REC	169199	10	11/20/2012 18:32	JT
Surr: Dibromofluoromethane	104	76.6-133		%REC	169199	1	11/20/2012 08:55	JT
Surr: Toluene-d8	88.5	77.8-120		%REC	169199	10	11/20/2012 18:32	JT
Surr: Toluene-d8	90.1	77.8-120		%REC	169199	1	11/20/2012 08:55	JT

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: EB-111512
Project Name: Owens Corning	Collection Date: 11/15/2012 12:00:00 PM
Lab ID: 1211E71-082	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 12:46	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 12:46	DB
Surr: 4-Bromofluorobenzene	96.2	64.6-123		%REC	169242	1	11/20/2012 12:46	DB
Surr: Dibromofluoromethane	98.9	76.6-133		%REC	169242	1	11/20/2012 12:46	DB
Surr: Toluene-d8	95.4	77.8-120		%REC	169242	1	11/20/2012 12:46	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-37 ZONE2
Project Name: Owens Corning	Collection Date: 11/15/2012 10:35:00 AM
Lab ID: 1211E71-083	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 13:16	DB
1,1-Dichloroethene	140	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Chloroform	6.8	5.0		ug/L	169242	1	11/20/2012 13:16	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 13:16	DB
Surr: 4-Bromofluorobenzene	94.5	64.6-123		%REC	169242	1	11/20/2012 13:16	DB
Surr: Dibromofluoromethane	101	76.6-133		%REC	169242	1	11/20/2012 13:16	DB
Surr: Toluene-d8	97.1	77.8-120		%REC	169242	1	11/20/2012 13:16	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-36 ZONE1
Project Name: Owens Corning	Collection Date: 11/15/2012 1:30:00 PM
Lab ID: 1211E71-084	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 13:46	DB
1,1-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 13:46	DB
Surr: 4-Bromofluorobenzene	97.7	64.6-123		%REC	169242	1	11/20/2012 13:46	DB
Surr: Dibromofluoromethane	98.8	76.6-133		%REC	169242	1	11/20/2012 13:46	DB
Surr: Toluene-d8	91.9	77.8-120		%REC	169242	1	11/20/2012 13:46	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-29R ZONE3
Project Name: Owens Corning	Collection Date: 11/15/2012 2:50:00 PM
Lab ID: 1211E71-085	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 14:16	DB
1,1-Dichloroethene	290	50		ug/L	169242	10	11/21/2012 00:50	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Chloroform	10	5.0		ug/L	169242	1	11/20/2012 14:16	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Carbon tetrachloride	16	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 14:16	DB
Surr: 4-Bromofluorobenzene	94.5	64.6-123		%REC	169242	10	11/21/2012 00:50	DB
Surr: 4-Bromofluorobenzene	98	64.6-123		%REC	169242	1	11/20/2012 14:16	DB
Surr: Dibromofluoromethane	96	76.6-133		%REC	169242	10	11/21/2012 00:50	DB
Surr: Dibromofluoromethane	104	76.6-133		%REC	169242	1	11/20/2012 14:16	DB
Surr: Toluene-d8	94.8	77.8-120		%REC	169242	10	11/21/2012 00:50	DB
Surr: Toluene-d8	96.9	77.8-120		%REC	169242	1	11/20/2012 14:16	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-29R ZONE4
Project Name: Owens Corning	Collection Date: 11/15/2012 3:20:00 PM
Lab ID: 1211E71-086	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 14:46	DB
1,1-Dichloroethene	290	50		ug/L	169242	10	11/21/2012 01:21	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Chloroform	11	5.0		ug/L	169242	1	11/20/2012 14:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Carbon tetrachloride	16	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 14:46	DB
Surr: 4-Bromofluorobenzene	92.6	64.6-123		%REC	169242	10	11/21/2012 01:21	DB
Surr: 4-Bromofluorobenzene	94.9	64.6-123		%REC	169242	1	11/20/2012 14:46	DB
Surr: Dibromofluoromethane	99.5	76.6-133		%REC	169242	10	11/21/2012 01:21	DB
Surr: Dibromofluoromethane	104	76.6-133		%REC	169242	1	11/20/2012 14:46	DB
Surr: Toluene-d8	94	77.8-120		%REC	169242	10	11/21/2012 01:21	DB
Surr: Toluene-d8	96.5	77.8-120		%REC	169242	1	11/20/2012 14:46	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-19
Project Name: Owens Corning	Collection Date: 11/15/2012 9:30:00 AM
Lab ID: 1211E71-087	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 15:16	DB
1,1-Dichloroethene	270	50		ug/L	169242	10	11/21/2012 01:51	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Chloroform	6.6	5.0		ug/L	169242	1	11/20/2012 15:16	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
1,2-Dichloroethane	7.4	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 15:16	DB
Surr: 4-Bromofluorobenzene	95.9	64.6-123		%REC	169242	1	11/20/2012 15:16	DB
Surr: 4-Bromofluorobenzene	95.4	64.6-123		%REC	169242	10	11/21/2012 01:51	DB
Surr: Dibromofluoromethane	96.4	76.6-133		%REC	169242	10	11/21/2012 01:51	DB
Surr: Dibromofluoromethane	104	76.6-133		%REC	169242	1	11/20/2012 15:16	DB
Surr: Toluene-d8	95.9	77.8-120		%REC	169242	1	11/20/2012 15:16	DB
Surr: Toluene-d8	95.1	77.8-120		%REC	169242	10	11/21/2012 01:51	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-15
Project Name: Owens Corning	Collection Date: 11/15/2012 11:50:00 AM
Lab ID: 1211E71-088	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/21/2012 02:51	DB
1,1-Dichloroethene	190	50		ug/L	169242	10	11/20/2012 02:42	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Benzene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Toluene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/21/2012 02:51	DB
Surr: 4-Bromofluorobenzene	92.9	64.6-123		%REC	169242	10	11/20/2012 02:42	DB
Surr: 4-Bromofluorobenzene	95.5	64.6-123		%REC	169242	1	11/21/2012 02:51	DB
Surr: Dibromofluoromethane	97.9	76.6-133		%REC	169242	1	11/21/2012 02:51	DB
Surr: Dibromofluoromethane	100	76.6-133		%REC	169242	10	11/20/2012 02:42	DB
Surr: Toluene-d8	94.8	77.8-120		%REC	169242	1	11/21/2012 02:51	DB
Surr: Toluene-d8	96.1	77.8-120		%REC	169242	10	11/20/2012 02:42	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-12
Project Name: Owens Corning	Collection Date: 11/15/2012 2:15:00 PM
Lab ID: 1211E71-089	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	4.1	2.0		ug/L	169242	1	11/21/2012 03:21	DB
1,1-Dichloroethene	380	50		ug/L	169242	10	11/20/2012 09:58	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Chloroform	13	5.0		ug/L	169242	1	11/21/2012 03:21	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Carbon tetrachloride	13	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Benzene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Toluene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/21/2012 03:21	DB
Surr: 4-Bromofluorobenzene	93.2	64.6-123		%REC	169242	1	11/21/2012 03:21	DB
Surr: 4-Bromofluorobenzene	93.6	64.6-123		%REC	169242	10	11/20/2012 09:58	DB
Surr: Dibromofluoromethane	95.6	76.6-133		%REC	169242	10	11/20/2012 09:58	DB
Surr: Dibromofluoromethane	101	76.6-133		%REC	169242	1	11/21/2012 03:21	DB
Surr: Toluene-d8	93.3	77.8-120		%REC	169242	10	11/20/2012 09:58	DB
Surr: Toluene-d8	97	77.8-120		%REC	169242	1	11/21/2012 03:21	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-13
Project Name: Owens Corning	Collection Date: 11/15/2012 3:55:00 PM
Lab ID: 1211E71-090	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/21/2012 12:34	DB
1,1-Dichloroethene	290	50		ug/L	169242	10	11/20/2012 10:29	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Chloroform	13	5.0		ug/L	169242	1	11/21/2012 12:34	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Carbon tetrachloride	23	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Benzene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
1,2-Dichloroethane	5.9	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Toluene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/21/2012 12:34	DB
Surr: 4-Bromofluorobenzene	92.5	64.6-123		%REC	169242	10	11/20/2012 10:29	DB
Surr: 4-Bromofluorobenzene	97.3	64.6-123		%REC	169242	1	11/21/2012 12:34	DB
Surr: Dibromofluoromethane	96	76.6-133		%REC	169242	10	11/20/2012 10:29	DB
Surr: Dibromofluoromethane	108	76.6-133		%REC	169242	1	11/21/2012 12:34	DB
Surr: Toluene-d8	94.5	77.8-120		%REC	169242	10	11/20/2012 10:29	DB
Surr: Toluene-d8	98.9	77.8-120		%REC	169242	1	11/21/2012 12:34	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-22
Project Name: Owens Corning	Collection Date: 11/15/2012 5:50:00 PM
Lab ID: 1211E71-091	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/21/2012 03:51	DB
1,1-Dichloroethene	320	50		ug/L	169242	10	11/20/2012 12:16	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Chloroform	11	5.0		ug/L	169242	1	11/21/2012 03:51	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Carbon tetrachloride	19	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Benzene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Toluene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/21/2012 03:51	DB
Surr: 4-Bromofluorobenzene	95.7	64.6-123		%REC	169242	1	11/21/2012 03:51	DB
Surr: 4-Bromofluorobenzene	94.7	64.6-123		%REC	169242	10	11/20/2012 12:16	DB
Surr: Dibromofluoromethane	96.9	76.6-133		%REC	169242	10	11/20/2012 12:16	DB
Surr: Dibromofluoromethane	100	76.6-133		%REC	169242	1	11/21/2012 03:51	DB
Surr: Toluene-d8	94.7	77.8-120		%REC	169242	1	11/21/2012 03:51	DB
Surr: Toluene-d8	94.8	77.8-120		%REC	169242	10	11/20/2012 12:16	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE2
Project Name: Owens Corning	Collection Date: 11/15/2012 5:30:00 PM
Lab ID: 1211E71-092	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 15:46	DB
1,1-Dichloroethene	78	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 15:46	DB
Surr: 4-Bromofluorobenzene	96.9	64.6-123		%REC	169242	1	11/20/2012 15:46	DB
Surr: Dibromofluoromethane	101	76.6-133		%REC	169242	1	11/20/2012 15:46	DB
Surr: Toluene-d8	96.2	77.8-120		%REC	169242	1	11/20/2012 15:46	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE1
Project Name: Owens Corning	Collection Date: 11/15/2012 3:05:00 PM
Lab ID: 1211E71-093	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 16:16	DB
1,1-Dichloroethene	190	50		ug/L	169242	10	11/21/2012 02:21	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 16:16	DB
Surr: 4-Bromofluorobenzene	94	64.6-123		%REC	169242	10	11/21/2012 02:21	DB
Surr: 4-Bromofluorobenzene	98.5	64.6-123		%REC	169242	1	11/20/2012 16:16	DB
Surr: Dibromofluoromethane	94.7	76.6-133		%REC	169242	10	11/21/2012 02:21	DB
Surr: Dibromofluoromethane	104	76.6-133		%REC	169242	1	11/20/2012 16:16	DB
Surr: Toluene-d8	93.1	77.8-120		%REC	169242	10	11/21/2012 02:21	DB
Surr: Toluene-d8	96.9	77.8-120		%REC	169242	1	11/20/2012 16:16	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Client: BROWN AND CALDWELL	Client Sample ID: MW-41 ZONE3
Project Name: Owens Corning	Collection Date: 11/15/2012 1:15:00 PM
Lab ID: 1211E71-094	Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)								
Vinyl chloride	BRL	2.0		ug/L	169242	1	11/20/2012 16:46	DB
1,1-Dichloroethene	78	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Methylene chloride	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
1,1-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Chloroform	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
1,1,1-Trichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Carbon tetrachloride	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Benzene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
1,2-Dichloroethane	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Trichloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Toluene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Tetrachloroethene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Ethylbenzene	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Xylenes, Total	BRL	5.0		ug/L	169242	1	11/20/2012 16:46	DB
Surr: 4-Bromofluorobenzene	98.7	64.6-123		%REC	169242	1	11/20/2012 16:46	DB
Surr: Dibromofluoromethane	104	76.6-133		%REC	169242	1	11/20/2012 16:46	DB
Surr: Toluene-d8	97.1	77.8-120		%REC	169242	1	11/20/2012 16:46	DB

Qualifiers:	* Value exceeds maximum contaminant level	E Estimated (value above quantitation range)
	BRL Below reporting limit	S Spike Recovery outside limits due to matrix
	H Holding times for preparation or analysis exceeded	Narr See case narrative
	N Analyte not NELAC certified	NC Not confirmed
	B Analyte detected in the associated method blank	< Less than Result value
	> Greater than Result value	J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Brown & Caldwell

Work Order Number 1211E71

Checklist completed by Jam B 11/17/12
Signature Date

Carrier name: FedEx UPS Courier Client US Mail Other

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Container/Temp Blank temperature in compliance? (4°C±2)* Yes No

Cooler #1 3.5 Cooler #2 3.2 Cooler #3 3.4 Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No 11/17/12
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Was TAT marked on the COC? Yes No
- Proceed with Standard TAT as per project history? Yes No Not Applicable
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? _____ Checked by _____

Sample Condition: Good Other(Explain) Missing Sample

(For diffusive samples or AIHA lead) Is a known blank included? Yes No

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169183

Sample ID: MB-169183	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233272							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169183	Analysis Date: 11/19/2012	Seq No: 4884414							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	46.09	0	50	0	92.2	64.6	123	0	0	0	0
Surr: Dibromofluoromethane	46.39	0	50	0	92.8	76.6	133	0	0	0	0
Surr: Toluene-d8	46.70	0	50	0	93.4	77.8	120	0	0	0	0

Sample ID: LCS-169183	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233272							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169183	Analysis Date: 11/19/2012	Seq No: 4884416							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	52.26	5.0	50	0	105	60	140	0	0	0	0
Benzene	56.26	5.0	50	0	113	70	130	0	0	0	0
Toluene	56.53	5.0	50	0	113	70	130	0	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169183

Sample ID: LCS-169183	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233272							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169183	Analysis Date: 11/19/2012	Seq No: 4884416							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Trichloroethene	59.29	5.0	50	0	119	70	130	0	0	0	
Surr: 4-Bromofluorobenzene	47.99	0	50	0	96	64.6	123	0	0	0	
Surr: Dibromofluoromethane	47.92	0	50	0	95.8	76.6	133	0	0	0	
Surr: Toluene-d8	48.05	0	50	0	96.1	77.8	120	0	0	0	

Sample ID: 1211E71-002AMS	Client ID: MW-35	Units: ug/L	Prep Date: 11/19/2012	Run No: 233272							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169183	Analysis Date: 11/19/2012	Seq No: 4884417							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	647.9	50	500	178.6	93.9	50.1	179	0	0	0	
Benzene	498.8	50	500	0	99.8	61.2	150	0	0	0	
Toluene	499.7	50	500	0	99.9	58.7	154	0	0	0	
Trichloroethene	509.6	50	500	0	102	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	478.0	0	500	0	95.6	64.6	123	0	0	0	
Surr: Dibromofluoromethane	495.0	0	500	0	99	76.6	133	0	0	0	
Surr: Toluene-d8	478.7	0	500	0	95.7	77.8	120	0	0	0	

Sample ID: 1211E71-002AMSD	Client ID: MW-35	Units: ug/L	Prep Date: 11/19/2012	Run No: 233272							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169183	Analysis Date: 11/19/2012	Seq No: 4884418							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	624.3	50	500	178.6	89.1	50.1	179	647.9	3.71	23.3	
Benzene	497.2	50	500	0	99.4	61.2	150	498.8	0.321	19	
Toluene	489.7	50	500	0	97.9	58.7	154	499.7	2.02	20	
Trichloroethene	509.8	50	500	0	102	68.3	149	509.6	0.039	17.7	
Surr: 4-Bromofluorobenzene	480.0	0	500	0	96	64.6	123	478.0	0	0	
Surr: Dibromofluoromethane	491.0	0	500	0	98.2	76.6	133	495.0	0	0	
Surr: Toluene-d8	471.4	0	500	0	94.3	77.8	120	478.7	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
 Project Name: Owens Corning
 Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169184

Sample ID: MB-169184	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233278							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169184	Analysis Date: 11/19/2012	Seq No: 4884553							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	42.19	0	50	0	84.4	64.6	123	0	0	0	0
Surr: Dibromofluoromethane	48.54	0	50	0	97.1	76.6	133	0	0	0	0
Surr: Toluene-d8	43.43	0	50	0	86.9	77.8	120	0	0	0	0

Sample ID: LCS-169184	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233278							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169184	Analysis Date: 11/19/2012	Seq No: 4884554							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	35.66	5.0	50	0	71.3	60	140	0	0	0	0
Benzene	39.59	5.0	50	0	79.2	70	130	0	0	0	0
Toluene	37.13	5.0	50	0	74.3	70	130	0	0	0	0
Trichloroethene	40.37	5.0	50	0	80.7	70	130	0	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169184

Sample ID: LCS-169184	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233278							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169184	Analysis Date: 11/19/2012	Seq No: 4884554							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	49.13	0	50	0	98.3	64.6	123	0	0	0	
Surr: Dibromofluoromethane	48.26	0	50	0	96.5	76.6	133	0	0	0	
Surr: Toluene-d8	44.62	0	50	0	89.2	77.8	120	0	0	0	

Sample ID: 1211E71-022AMS	Client ID: MW-9	Units: ug/L	Prep Date: 11/19/2012	Run No: 233278							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169184	Analysis Date: 11/19/2012	Seq No: 4884557							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	53.67	5.0	50	3.360	101	50.1	179	0	0	0	
Benzene	54.90	5.0	50	0	110	61.2	150	0	0	0	
Toluene	51.29	5.0	50	0	103	58.7	154	0	0	0	
Trichloroethene	55.41	5.0	50	0	111	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	49.16	0	50	0	98.3	64.6	123	0	0	0	
Surr: Dibromofluoromethane	49.16	0	50	0	98.3	76.6	133	0	0	0	
Surr: Toluene-d8	44.80	0	50	0	89.6	77.8	120	0	0	0	

Sample ID: 1211E71-022AMSD	Client ID: MW-9	Units: ug/L	Prep Date: 11/19/2012	Run No: 233278							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169184	Analysis Date: 11/19/2012	Seq No: 4884558							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	45.53	5.0	50	3.360	84.3	50.1	179	53.67	16.4	23.3	
Benzene	47.87	5.0	50	0	95.7	61.2	150	54.90	13.7	19	
Toluene	44.64	5.0	50	0	89.3	58.7	154	51.29	13.9	20	
Trichloroethene	47.91	5.0	50	0	95.8	68.3	149	55.41	14.5	17.7	
Surr: 4-Bromofluorobenzene	49.06	0	50	0	98.1	64.6	123	49.16	0	0	
Surr: Dibromofluoromethane	49.10	0	50	0	98.2	76.6	133	49.16	0	0	
Surr: Toluene-d8	44.58	0	50	0	89.2	77.8	120	44.80	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
 Project Name: Owens Corning
 Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169199

Sample ID: MB-169199	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233299							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169199	Analysis Date: 11/19/2012	Seq No: 4885032							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	45.27	0	50	0	90.5	64.6	123	0	0	0	0
Surr: Dibromofluoromethane	44.89	0	50	0	89.8	76.6	133	0	0	0	0
Surr: Toluene-d8	42.34	0	50	0	84.7	77.8	120	0	0	0	0

Sample ID: LCS-169199	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233299							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169199	Analysis Date: 11/19/2012	Seq No: 4885031							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	50.02	5.0	50	0	100	60	140	0	0	0	0
Benzene	52.29	5.0	50	0	105	70	130	0	0	0	0
Toluene	51.49	5.0	50	0	103	70	130	0	0	0	0
Trichloroethene	52.04	5.0	50	0	104	70	130	0	0	0	0

Qualifiers:	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method blank
BRL	Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S Spike Recovery outside limits due to matrix	

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169199

Sample ID: LCS-169199	Client ID:	Units: ug/L	Prep Date: 11/19/2012	Run No: 233299							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169199	Analysis Date: 11/19/2012	Seq No: 4885031							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	52.23	0	50	0	104	64.6	123	0	0	0	
Surr: Dibromofluoromethane	45.59	0	50	0	91.2	76.6	133	0	0	0	
Surr: Toluene-d8	45.50	0	50	0	91	77.8	120	0	0	0	

Sample ID: 1211E71-071AMS	Client ID: MW-28	Units: ug/L	Prep Date: 11/19/2012	Run No: 233299							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169199	Analysis Date: 11/20/2012	Seq No: 4885034							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	427400	25000	250000	137900	116	50.1	179	0	0	0	
Benzene	259600	25000	250000	0	104	61.2	150	0	0	0	
Toluene	264500	25000	250000	0	106	58.7	154	0	0	0	
Trichloroethene	262800	25000	250000	0	105	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	277400	0	250000	0	111	64.6	123	0	0	0	
Surr: Dibromofluoromethane	228500	0	250000	0	91.4	76.6	133	0	0	0	
Surr: Toluene-d8	228500	0	250000	0	91.4	77.8	120	0	0	0	

Sample ID: 1211E71-071AMSD	Client ID: MW-28	Units: ug/L	Prep Date: 11/19/2012	Run No: 233299							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169199	Analysis Date: 11/20/2012	Seq No: 4885035							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	346400	25000	250000	137900	83.4	50.1	179	427400	20.9	23.3	
Benzene	258800	25000	250000	0	104	61.2	150	259600	0.309	19	
Toluene	258000	25000	250000	0	103	58.7	154	264500	2.49	20	
Trichloroethene	255000	25000	250000	0	102	68.3	149	262800	2.99	17.7	
Surr: 4-Bromofluorobenzene	265900	0	250000	0	106	64.6	123	277400	0	0	
Surr: Dibromofluoromethane	234200	0	250000	0	93.7	76.6	133	228500	0	0	
Surr: Toluene-d8	225200	0	250000	0	90.1	77.8	120	228500	0	0	

Qualifiers: > Greater than Result value < Less than Result value B Analyte detected in the associated method blank
 BRL Below reporting limit E Estimated (value above quantitation range) H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169242

Sample ID: MB-169242	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233334							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169242	Analysis Date: 11/20/2012	Seq No: 4886034							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	0
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	0
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	0
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	47.65	0	50	0	95.3	64.6	123	0	0	0	0
Surr: Dibromofluoromethane	50.66	0	50	0	101	76.6	133	0	0	0	0
Surr: Toluene-d8	47.58	0	50	0	95.2	77.8	120	0	0	0	0

Sample ID: LCS-169242	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233334							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169242	Analysis Date: 11/20/2012	Seq No: 4886035							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	58.09	5.0	50	0	116	60	140	0	0	0	0
Benzene	59.15	5.0	50	0	118	70	130	0	0	0	0
Toluene	58.44	5.0	50	0	117	70	130	0	0	0	0
Trichloroethene	60.48	5.0	50	0	121	70	130	0	0	0	0

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169242

Sample ID: LCS-169242	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233334							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169242	Analysis Date: 11/20/2012	Seq No: 4886035							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	50.61	0	50	0	101	64.6	123	0	0	0	
Surr: Dibromofluoromethane	52.29	0	50	0	105	76.6	133	0	0	0	
Surr: Toluene-d8	48.87	0	50	0	97.7	77.8	120	0	0	0	

Sample ID: 1211E71-088AMS	Client ID: MW-15	Units: ug/L	Prep Date: 11/20/2012	Run No: 233334							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169242	Analysis Date: 11/20/2012	Seq No: 4886039							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	751.8	50	500	185.6	113	50.1	179	0	0	0	
Benzene	579.0	50	500	0	116	61.2	150	0	0	0	
Toluene	587.7	50	500	0	118	58.7	154	0	0	0	
Trichloroethene	606.9	50	500	0	121	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	506.9	0	500	0	101	64.6	123	0	0	0	
Surr: Dibromofluoromethane	519.8	0	500	0	104	76.6	133	0	0	0	
Surr: Toluene-d8	493.5	0	500	0	98.7	77.8	120	0	0	0	

Sample ID: 1211E71-088AMSD	Client ID: MW-15	Units: ug/L	Prep Date: 11/20/2012	Run No: 233334							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169242	Analysis Date: 11/20/2012	Seq No: 4886040							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	732.4	50	500	185.6	109	50.1	179	751.8	2.61	23.3	
Benzene	561.9	50	500	0	112	61.2	150	579.0	3	19	
Toluene	565.1	50	500	0	113	58.7	154	587.7	3.92	20	
Trichloroethene	599.8	50	500	0	120	68.3	149	606.9	1.18	17.7	
Surr: 4-Bromofluorobenzene	497.6	0	500	0	99.5	64.6	123	506.9	0	0	
Surr: Dibromofluoromethane	508.5	0	500	0	102	76.6	133	519.8	0	0	
Surr: Toluene-d8	482.9	0	500	0	96.6	77.8	120	493.5	0	0	

Qualifiers: > Greater than Result value < Less than Result value B Analyte detected in the associated method blank
 BRL Below reporting limit E Estimated (value above quantitation range) H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169247

Sample ID: MB-169247	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233360
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169247	Analysis Date: 11/20/2012	Seq No: 4886492

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
1,2-Dichloroethane	BRL	5.0	0	0	0	0	0	0	0	0	
Benzene	BRL	5.0	0	0	0	0	0	0	0	0	
Carbon tetrachloride	BRL	5.0	0	0	0	0	0	0	0	0	
Chloroform	BRL	5.0	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Ethylbenzene	BRL	5.0	0	0	0	0	0	0	0	0	
Methylene chloride	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Toluene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Xylenes, Total	BRL	5.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	42.87	0	50	0	85.7	64.6	123	0	0	0	
Surr: Dibromofluoromethane	49.34	0	50	0	98.7	76.6	133	0	0	0	
Surr: Toluene-d8	43.76	0	50	0	87.5	77.8	120	0	0	0	

Sample ID: LCS-169247	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233360
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169247	Analysis Date: 11/20/2012	Seq No: 4886493

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	48.00	5.0	50	0	96	60	140	0	0	0	
Benzene	47.14	5.0	50	0	94.3	70	130	0	0	0	
Toluene	44.79	5.0	50	0	89.6	70	130	0	0	0	
Trichloroethene	48.71	5.0	50	0	97.4	70	130	0	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: BROWN AND CALDWELL
Project Name: Owens Corning
Workorder: 1211E71

ANALYTICAL QC SUMMARY REPORT

BatchID: 169247

Sample ID: LCS-169247	Client ID:	Units: ug/L	Prep Date: 11/20/2012	Run No: 233360							
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169247	Analysis Date: 11/20/2012	Seq No: 4886493							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Surr: 4-Bromofluorobenzene	49.36	0	50	0	98.7	64.6	123	0	0	0	
Surr: Dibromofluoromethane	50.16	0	50	0	100	76.6	133	0	0	0	
Surr: Toluene-d8	45.66	0	50	0	91.3	77.8	120	0	0	0	

Sample ID: 1211E71-051AMS	Client ID: MW-37 ZONE1	Units: ug/L	Prep Date: 11/20/2012	Run No: 233360							
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169247	Analysis Date: 11/20/2012	Seq No: 4886498							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	607.3	50	500	102.5	101	50.1	179	0	0	0	
Benzene	492.9	50	500	13.10	96	61.2	150	0	0	0	
Toluene	472.2	50	500	21.90	90.1	58.7	154	0	0	0	
Trichloroethene	497.2	50	500	0	99.4	68.3	149	0	0	0	
Surr: 4-Bromofluorobenzene	495.1	0	500	0	99	64.6	123	0	0	0	
Surr: Dibromofluoromethane	511.0	0	500	0	102	76.6	133	0	0	0	
Surr: Toluene-d8	455.1	0	500	0	91	77.8	120	0	0	0	

Sample ID: 1211E71-051AMSD	Client ID: MW-37 ZONE1	Units: ug/L	Prep Date: 11/20/2012	Run No: 233360							
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 169247	Analysis Date: 11/20/2012	Seq No: 4886499							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	599.9	50	500	102.5	99.5	50.1	179	607.3	1.23	23.3	
Benzene	478.3	50	500	13.10	93	61.2	150	492.9	3.01	19	
Toluene	454.7	50	500	21.90	86.6	58.7	154	472.2	3.78	20	
Trichloroethene	486.7	50	500	0	97.3	68.3	149	497.2	2.13	17.7	
Surr: 4-Bromofluorobenzene	490.6	0	500	0	98.1	64.6	123	495.1	0	0	
Surr: Dibromofluoromethane	499.9	0	500	0	100	76.6	133	511.0	0	0	
Surr: Toluene-d8	451.5	0	500	0	90.3	77.8	120	455.1	0	0	

Qualifiers: > Greater than Result value < Less than Result value B Analyte detected in the associated method blank
 BRL Below reporting limit E Estimated (value above quantitation range) H Holding times for preparation or analysis exceeded
 J Estimated value detected below Reporting Limit N Analyte not NELAC certified R RPD outside limits due to matrix
 Rpt Lim Reporting Limit S Spike Recovery outside limits due to matrix

Appendix C: Historical Groundwater Data

(Excerpted from the *2005 Annual Groundwater and Surface Water Monitoring Report*, ARCADIS G&M, Inc., 2006)

Table E-1 Summary of Selected Groundwater Analytical Results for Overburden Wells, Owens Corning, Anderson, South Carolina.

Sample dates	Units	November-90	August 91	August-93	December-95	December-96	November-97	December-98	December-99	December-00	November-01	December-02	December-03	December-04	November-05
MW-5															
Halogenated Alkenes															
Tetrachloroethene	ug/l	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perchloroethene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/l	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes															
Carbon Tetrachloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Ethenes															
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons															
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals															
Arsenic	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	ug/l	390	240	174	100	100	100	130	89	140	140	NA	NA	NA	NA
Cadmium	ug/l	NA	1	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Chromium	ug/l	ND	16	10	4	2	ND	4	ND	ND	ND	NA	NA	NA	NA
Copper	ug/l	ND	ND	NA	3.2	ND	ND	8	ND	ND	ND	NA	NA	NA	NA
Lead	ug/l	ND	7.1	ND	ND	1	ND	3	ND	ND	ND	NA	NA	NA	NA
Fluoride	mg/l	NA	ND	NA	31.4	31.4	100	ND	ND	176	ND	NA	NA	NA	NA

NA Not Analyzed
 ND Not Detected
 ND Not Determined

Table E-1. Summary of Selected Groundwater Analytical Results for Overburden Wells, Owens Corning, Anderson, South Carolina.

Sample dates	Units	November-90	August-91	September-93	December-95	December-96	November-97	December-98	December-99	December-00	November-01	December-02	June-03	December-03	April-04	July-04	December-04	November-05	
MW-7																			
Alkylated Alkanes																			
1,2-Dichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	ND	ND	4.51	ND
1,1,1-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	26.6	ND	ND	ND	ND	ND	ND	ND	ND	3.21	ND
1,1,2-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	14000	27600	45000	1600	4400	6200	3200	1000	17000	ND	ND
1,1,1,1-Tetrafluoroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alkylated Methanes																			
Acetone	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propylene	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alkylated Ethanes																			
1,1,1-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	24600	36500	76000	18000	9100	13000	8300	3600	55000	ND	ND
1,1,2-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	17.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons																			
Benzene	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/L	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes	ug/L	NA	NA	NA	ND	ND	ND	ND	220	190	170	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ug/L	NA	NA	NA	ND	ND	ND	ND	24	27	25	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4,5-Tetrachlorobenzene	ug/L	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4-Tetrachlorobenzene	ug/L	NA	NA	NA	ND	ND	ND	ND	120	160	170	NA	NA	NA	NA	NA	NA	NA	NA
Summary																			
1,1,1-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	1700000	720000	1780000	NA	1500	NA	250	500	NA	NA	NA
1,1,2-Trichloroethane	ug/L	NA	NA	NA	ND	ND	ND	ND	40000	45000	100000	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Analyzed
 ND = Not Detected
 Values are in ug/L

ARCADIS

Table E-2. Summary of Selected Groundwater Results for the Top of Rock Wells, Owens Corning, Anderson, South Carolina.

Sample dates	Units	MW-21										MW-24														
		August-93	December-95	December-96	November-97	December-98	December-99	December-00	November-01	December-02	December-03	December-04	November-05	September-93	December-95	December-96	November-97	December-98	December-99	December-00	November-01	December-02	December-03	December-04		
Halogenated Alkenes																										
Tetrafluoroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/l	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes																										
Carbon Tetrachloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Ethanes																										
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons																										
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																										
Arsenic	ug/l	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	ug/l	1200	601	200	100	100	130	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	ug/l	3.3	2.2	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ug/l	9.5	4	2.8	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ug/l	7.5	31.7	6.7	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ug/l	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride																										
Fluoride	ug/l	NA	ND	44.9	100	ND	ND	180	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ND - Not Detected
 NA - Not Analyzed
 Quantities are ug/L unless noted

Table E-2. Summary of Selected Groundwater Results for the Top of Rock Wells, Owens Corning, Anderson, South Carolina.

Sample dates	Units	TW-42				TW-46							
		December-02	December-03	December-04	November-05	October-01	November-01	December-02	December-03	December-04	November-05		
Halogenated Alkenes													
Tetrachloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes													
Carbon Tetrachloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Ethanes													
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons													
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals													
Aluminum	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride													
	mg/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ND = Not Detected
 NA = Not Analyzed
 Squares are Not Listed

Table E-3. Summary of Selected Groundwater Results for Bedrock Wells, Owens Corning, Anderson, South Carolina.

Parameter	Units	MW-22							MW-27																
		August-93	December-95	December-96	December-98	December-99	December-00	Nov-01	December-02	December-03	December-04	November-05	September-93	December-95	December-96	December-98	December-99	December-00	Nov-01	December-02	December-03	December-04	November-05		
Halogenated Alkenes																									
Tetra chloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/l	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/l	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes																									
Carbon Tetrachloride	ug/l	18	26	47	21	24	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/l	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Ethanes																									
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons																									
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																									
Asbestos	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Boron	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride																									
Fluoride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
NA = Not Analyzed

Table E-3. Summary of Selected Groundwater Results for Barrock Wells, Owens Corning, Anderson, South Carolina.

Parameter	Units	MW-29R		Alloy										Gladden						
		December-04	November-05	September-93	December-95	December-96	November-97	December-98	December-99	December-00	Nov-01	December-02	December-03	December-04	November-05	September-93	December-96	November-97	December-98	
Halogenated Alkenes																				
Tetrachloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/l	2.0	95	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Vinyl Chloride	ug/l	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes																				
Carbon Tetrachloride	ug/l	12	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	11	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7
Halogenated Ethanes																				
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons																				
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																				
Arsenic	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	ug/l	NA	NA	1100	216	160	50	40	88	65	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	ug/l	NA	NA	3.1	1.1	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ug/l	NA	NA	22	4	3.6	3	2	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	ug/l	NA	NA	190	34	25.9	6	6	7.8	5.5	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	ug/l	NA	NA	28	5.6	ND	3	3	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	ug/l	NA	NA	370	ND	88.3	100	100	100	100	230	ND	NA	NA	NA	NA	45.3	200	ND	ND

NA = Not Analyzed
 ND = Not Detected

Table E.3 Summary of Selected Groundwater Results for Bedrock Wells, Owens Corning, Anderson, South Carolina.

Parameter	Units	TW-40				TW-41				TW-44					
		October-01	November-01	December-02	December-03	December-04	November-01	December-02	December-03	December-04	November-01	December-02	December-03	December-04	November-05
Halogenated Alkenes															
Tetrachloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Methanes															
Carbon tetrachloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Halogenated Ethanes															
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aromatic Hydrocarbons															
benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals															
Acetone	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
butane	ug/l	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
hexane	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
toluene	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nitrobenzene	ug/l	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride															
	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected
 NA = Not Analyzed

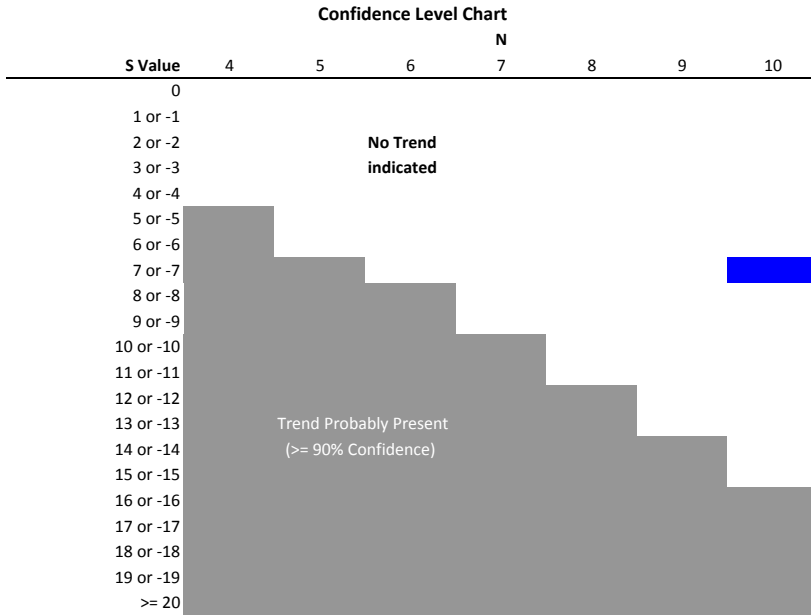
Appendix D: Mann-Kendall Test Results

**Mann-Kendall Test - 1,1-DCE in MW-37 Zone 3
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	2.5	6.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Row 1: Compare to Aug-10		1	0	0	0	0	0	0	0	0	1
Row 2: Compare to Nov-10			-1	-1	-1	-1	-1	-1	-1	-1	-8
Row 3: Compare to Feb-11				0	0	0	0	0	0	0	0
Row 4: Compare to May-11					0	0	0	0	0	0	0
Row 5: Compare to Aug-11						0	0	0	0	0	0
Row 6: Compare to Nov-11							0	0	0	0	0
Row 7: Compare to Feb-12								0	0	0	0
Row 8: Compare to May-12									0	0	0
Row 9: Compare to Aug-12										0	0

Mann-Kendall Statistic (S) = -7
N = 10

Conclusion: No Trend (stable)



Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

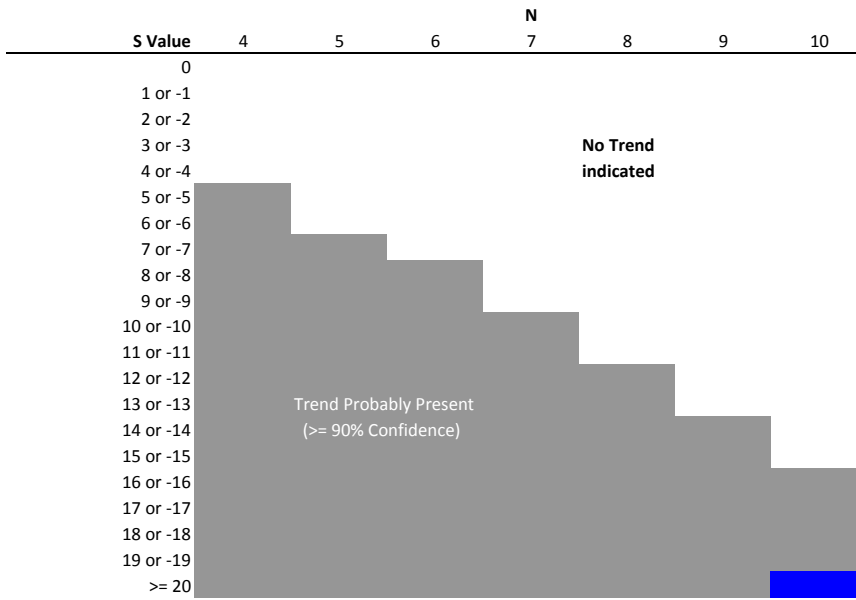
**Mann-Kendall Test - 1,1-DCE in MW-41 Zone 1
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	340	300	380	450	400	190	240	220	200	190	
Row 1: Compare to Aug-10		-1	1	1	1	-1	-1	-1	-1	-1	-3
Row 2: Compare to Nov-10			1	1	1	-1	-1	-1	-1	-1	-2
Row 3: Compare to Feb-11				1	1	-1	-1	-1	-1	-1	-3
Row 4: Compare to May-11					-1	-1	-1	-1	-1	-1	-6
Row 5: Compare to Aug-11						-1	-1	-1	-1	-1	-5
Row 6: Compare to Nov-11							1	1	1	0	3
Row 7: Compare to Feb-12								-1	-1	-1	-3
Row 8: Compare to May-12									-1	-1	-2
Row 9: Compare to Aug-12										-1	-1

Mann-Kendall Statistic (S) = -22
N = 10

Conclusion: Decreasing Trend

Confidence Level Chart



Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration increasing

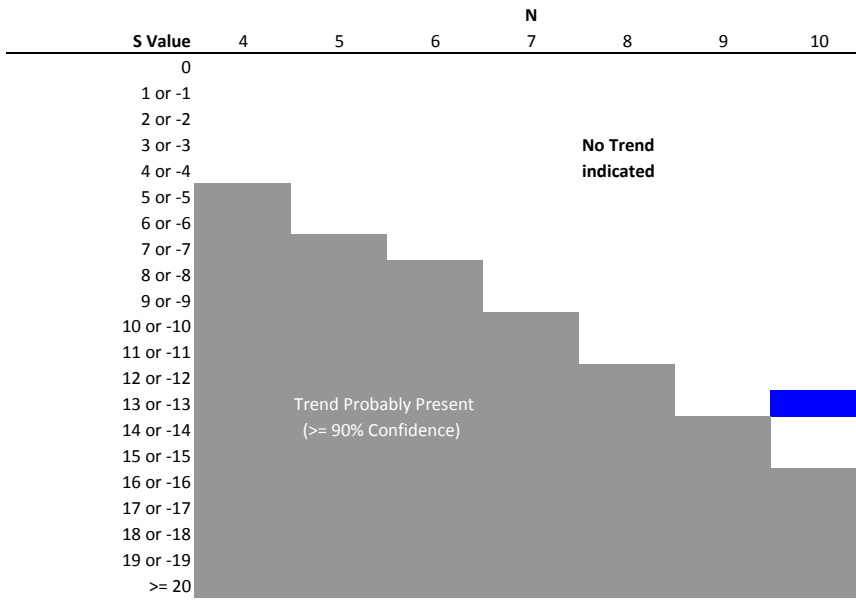
**Mann-Kendall Test - 1,1-DCE in MW-41 Zone 2
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	340	300	380	450	400	190	240	250	360	78	
Row 1: Compare to Aug-10		-1	1	1	1	-1	-1	-1	1	-1	-1
Row 2: Compare to Nov-10			1	1	1	-1	-1	-1	1	-1	0
Row 3: Compare to Feb-11				1	1	-1	-1	-1	-1	-1	-3
Row 4: Compare to May-11					-1	-1	-1	-1	-1	-1	-6
Row 5: Compare to Aug-11						-1	-1	-1	-1	-1	-5
Row 6: Compare to Nov-11							1	1	1	-1	2
Row 7: Compare to Feb-12								1	1	-1	1
Row 8: Compare to May-12									1	-1	0
Row 9: Compare to Aug-12										-1	-1

Mann-Kendall Statistic (S) = -13
N = 10

Conclusion: No Trend (Stable)

Confidence Level Chart



Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

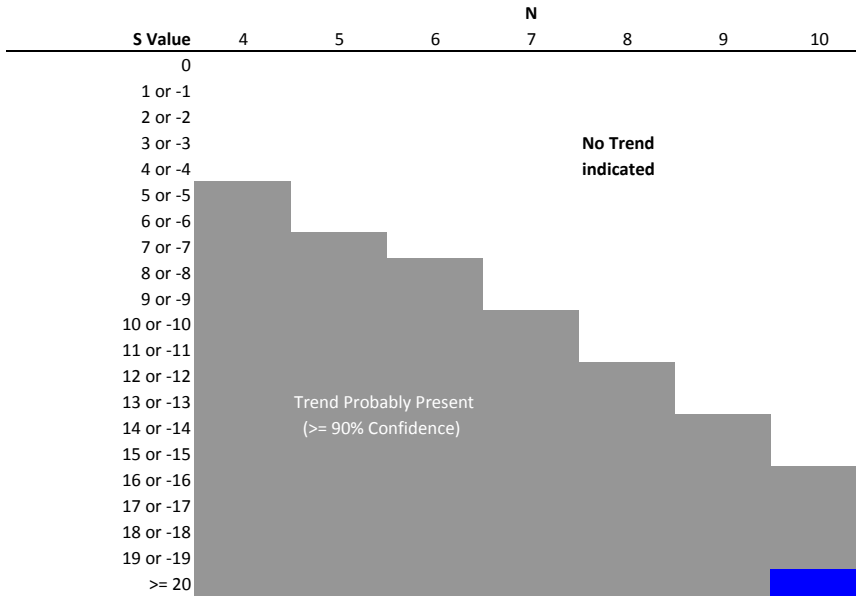
**Mann-Kendall Test - 1,1-DCE in MW-41 Zone 3
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	260	180	150	98	110	98	55	54	8.9	78	
Row 1: Compare to Aug-10		-1	-1	-1	-1	-1	-1	-1	-1	-1	-9
Row 2: Compare to Nov-10			-1	-1	-1	-1	-1	-1	-1	-1	-8
Row 3: Compare to Feb-11				-1	-1	-1	-1	-1	-1	-1	-7
Row 4: Compare to May-11					1	0	-1	-1	-1	-1	-3
Row 5: Compare to Aug-11						-1	-1	-1	-1	-1	-5
Row 6: Compare to Nov-11							-1	-1	-1	-1	-4
Row 7: Compare to Feb-12								-1	-1	1	-1
Row 8: Compare to May-12									-1	1	0
Row 9: Compare to Aug-12										1	1

Mann-Kendall Statistic (S) = -36
N = 10

Conclusion: Decreasing Trend

Confidence Level Chart



Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration increasing

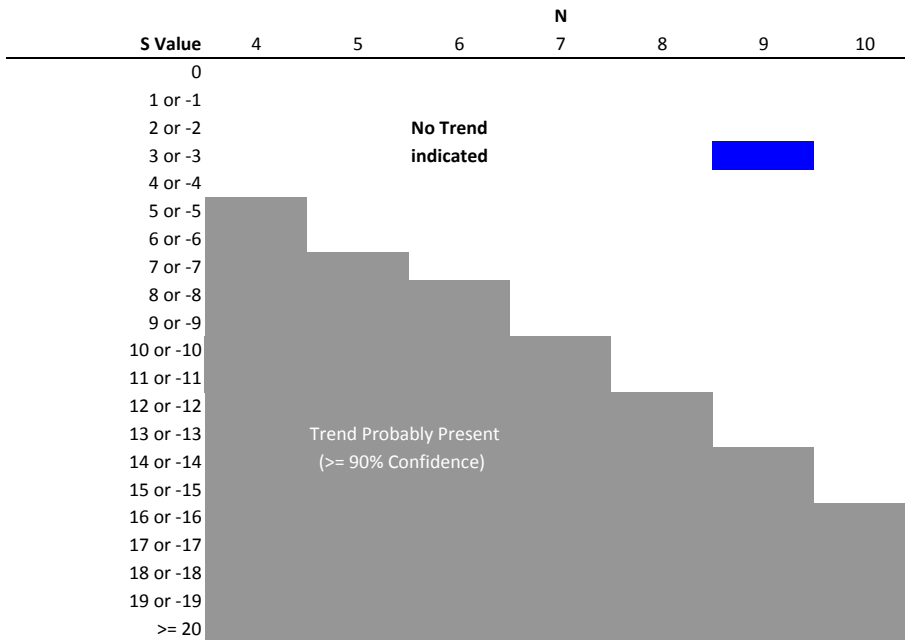
**Mann-Kendall Test - 1,1-DCE at SW-3A
Owens Corning - Anderson, SC**

Date	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08	Nov-09	Nov-10	Nov-11	Nov-12	Sum of
Concentration (ug/L)	180	2.4	2.3	390	84	290	120	2.5	2.5	Rows
Row 1: Compare to Nov-04		-1	-1	1	-1	1	-1	-1	-1	-4
Row 2: Compare to Nov-05			-1	1	1	1	1	1	1	5
Row 3: Compare to Nov-06				1	1	1	1	1	1	6
Row 4: Compare to Nov-07					-1	-1	-1	-1	-1	-5
Row 5: Compare to Nov-08						1	1	-1	-1	0
Row 6: Compare to Nov-09							-1	-1	-1	-3
Row 7: Compare to Nov-10								-1	-1	-2
Row 8: Compare to Nov-11									0	0

Mann-Kendall Statistic (S) = -3
N = 9

Conclusion: No Trend (Stable)

Confidence Level Chart

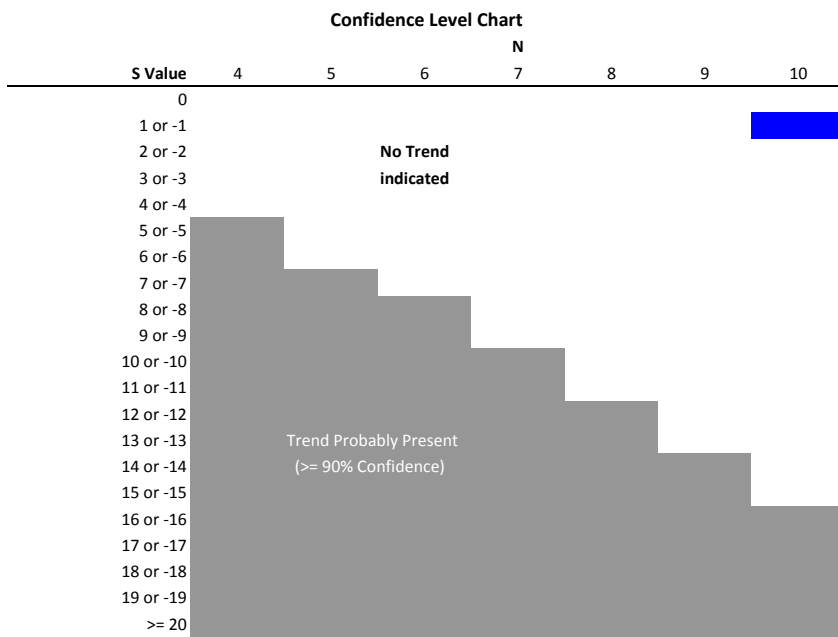


Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

**Mann-Kendall Test - Carbon Tetrachloride in MW-22
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	17	25	19	23	25	24	31	16	21	19	
Row 1: Compare to Aug-10		1		1	1	1	1	-1	1	1	7
Row 2: Compare to Nov-10			-1	-1	0	-1	1	-1	-1	-1	-5
Row 3: Compare to Feb-11				1	1	1	1	-1	1	0	4
Row 4: Compare to May-11					1	1	1	-1	-1	-1	0
Row 5: Compare to Aug-11						-1	1	-1	-1	-1	-3
Row 6: Compare to Nov-11							1	-1	-1	-1	-2
Row 7: Compare to Feb-12								-1	-1	-1	-3
Row 8: Compare to May-12									1	1	2
Row 9: Compare to Aug-12										-1	-1
Mann-Kendall Statistic (S) =											-1
N =											10

Conclusion: No Trend (Stable)



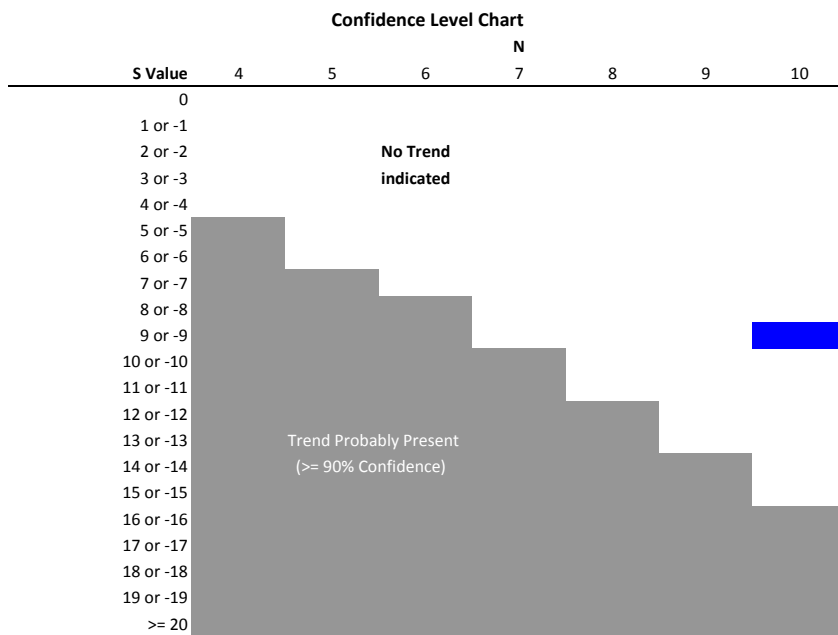
Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

**Mann-Kendall Test - Carbon Tetrachloride in MW-29R Zone 3
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	17	15	16	23	19	17	10	9.4	17	16	
Row 1: Compare to Aug-10		-1	-1	1	1	0	-1	-1	0	-1	-3
Row 2: Compare to Nov-10			1	1	1	1	-1	-1	1	1	4
Row 3: Compare to Feb-11				1	1	1	-1	-1	1	0	2
Row 4: Compare to May-11					-1	-1	-1	-1	-1	-1	-6
Row 5: Compare to Aug-11						-1	-1	-1	-1	-1	-5
Row 6: Compare to Nov-11							-1	-1	0	-1	-3
Row 7: Compare to Feb-12								-1	1	1	1
Row 8: Compare to May-12									1	1	2
Row 9: Compare to Aug-12										-1	-1

Mann-Kendall Statistic (S) = -9
N = 10

Conclusion: No Trend (Stable)

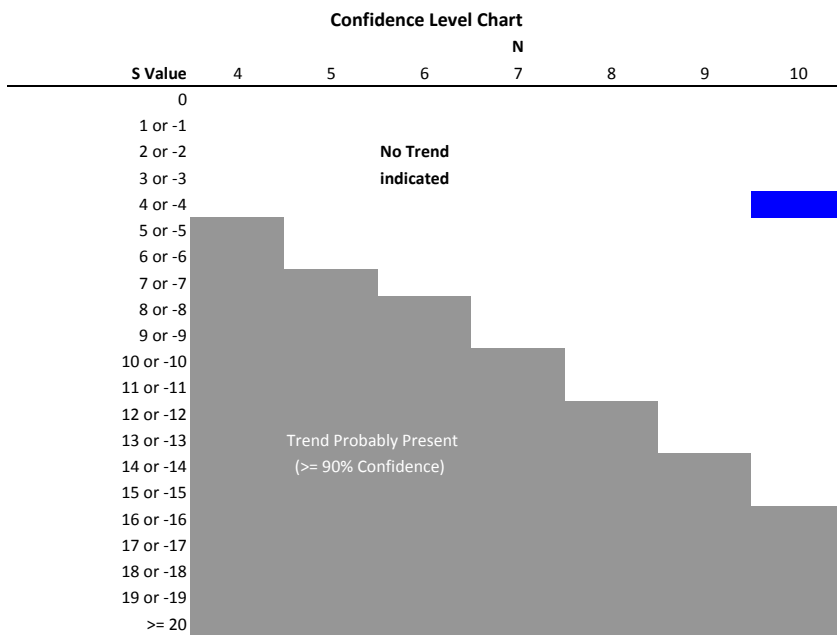


Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

**Mann-Kendall Test - Carbon Tetrachloride in MW-29R Zone 4
Owens Corning - Anderson, SC**

Date	Aug-10	Nov-10	Feb-11	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12	Nov-12	Sum of Rows
Concentration (ug/L)	15	12	16	23	20	21	2.5	13	16	16	
Row 1: Compare to Aug-10		-1	1	1	1	1	-1	-1	1	1	3
Row 2: Compare to Nov-10			1	1	1	1	-1	1	1	1	6
Row 3: Compare to Feb-11				1	1	1	-1	-1	0	0	1
Row 4: Compare to May-11					-1	-1	-1	-1	-1	-1	-4
Row 5: Compare to Aug-11						1	-1	-1	-1	-1	-3
Row 6: Compare to Nov-11							-1	-1	-1	-1	-4
Row 7: Compare to Feb-12								1	1	1	3
Row 8: Compare to May-12									1	1	2
Row 9: Compare to Aug-12										0	0
Mann-Kendall Statistic (S) =											4
N =											10

Conclusion: No Trend (Stable)



Stability Evaluation Results	
Trend present (>= 90% Confidence)	
S < 0	Concentration decreasing
S > 0	Concentration Increasing

Appendix A: Groundwater Sampling Field Data Sheets

Appendix B: Laboratory Analytical Reports

Appendix C: Historical Groundwater Data

(Excerpted from the *2005 Annual Groundwater and Surface Water Monitoring Report*, ARCADIS G&M, Inc., 2006)

Appendix D: Mann-Kendall Test Results
